# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start  | 0.00      | Rating **      | М        | Issue No.  |        | 66          |   |
|---|-----------|----------------|----------|------------|--------|-------------|---|
| LM End  | 0.00      | Issue Type +   | Ma       | Location * |        | N/A         |   |
| Category  | Earthen L | evee           |          | GPS La     | atitud | e/Longitude |   |
| Calegory  |           |                |          | Start      |        | End         |   |
| Item  | Flood Pre | paredness &    | Training |            | 0      |             | 0 |
| item  |           |                |          |            | 0      |             | 0 |
| DWR ID  | DWR_RD0   | 544_01_s _ 201 | 2_66     |            |        |             |   |
|   |           | Comn           | nent Cod | le         |        |             |   |
|   |           |                |          |            |        |             |   |
|   |           | Inspecto       | or Comm  | nent       |        |             |   |
| The LMA has a good working knowledge of flood response. However, LMA has not been involved in flood training for several years. |           |                |          |            |        |             |   |
|   |           |                |          |            |        |             |   |

No Photos

| LM Start               | 0.00      | Rating **      | Α    | Issue No.  |        | 71          |   |
|------------------------|-----------|----------------|------|------------|--------|-------------|---|
| LM End                 | 0.00      | Issue Type +   | Ma   | Location * |        | N/A         |   |
| Category Earthen Levee |           |                |      | GPS La     | atitud | e/Longitude |   |
| Calegory               | Start     |                | End  |            |        |             |   |
| Item                   | Operation |                | 0    |            | 0      |             |   |
| пеш                    | Manuals   |                |      |            | 0      |             | 0 |
| DWR ID                 | DWR_RD0   | 544_01_s _ 201 | 3_71 |            |        |             |   |
| Comment Code           |           |                |      |            |        |             |   |
|                        |           |                |      |            |        |             |   |

No Photos

|            | Inspe               | ctor Comment                |  |
|------------|---------------------|-----------------------------|--|
| The LMA ha | as a copy of O&M ma | anual on file in the office |  |
|            |                     |                             |  |
|            |                     |                             |  |
|            |                     |                             |  |

| LM Start  | 0.00   | Rating **      | Α        | Issue No.  |  | 72          |  |  |  |
|-----------|--|----------------|----------|------------|--|-------------|--|--|--|
| LM End    | 0.00   | Issue Type +   | Ма       | Location * |  | N/A         |  |  |  |
| Category  | Category Earthen Levee                                       |                |          |            |  | e/Longitude |  |  |  |
| Calegory  |  |                |          |            |  | End         |  |  |  |
| Item      |  | y Supplies &   |          | 0          |  | 0           |  |  |  |
| пеш       | Equipmen   |                |          | 0          |  | 0           |  |  |  |
| DWR ID    | DWR_RD0  | 544_01_s _ 201 | 3_72     |            |  |             |  |  |  |
|           |  | Comn           | nent Cod | de         |  |             |  |  |  |
|           |  |                |          |            |  |             |  |  |  |
|           |  |                |          |            |  |             |  |  |  |
|           | Inspector Comment  |                |          |            |  |             |  |  |  |
| The LMA r | The LMA maintains an adequate supply of floodfight material. |                |          |            |  |             |  |  |  |

No Photos

| * Location                          | ** Rating                |   | + Issue Type                      |
|-------------------------------------|--------------------------|---|-----------------------------------|
| LS : Land Side N/A : Not Applicable | A : Acceptable           | N : Not Inspected/Rated                 | Ma : Maintenance Deficiancy       |
| WS: Water Side                      | M : Minimally Acceptable | C : Corrected                           | Ob : Design & System Obsolescence |
| CR : Crown                          | U : Unacceptable         | A/W : Acceptable but Monitor & Maintain | En : Enforcement                  |

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# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

|             |                                   | 5 // **        |          |               |        |               |  |  |
|-------------|-----------------------------------|----------------|----------|---------------|--------|---------------|--|--|
| LM Start    | 0.01                              | Rating **      | М        | Issue No.     |        | 92            |  |  |
| LM End      | 0.01                              | Issue Type +   | Ma       | Location *    |        | LS            |  |  |
| Category    | Earthen L                         | evee           |          | GPS La        | atitud | e/Longitude   |  |  |
| Category    |                                   |                |          | Start         |        | End           |  |  |
| Item        | Trim / Thi                        | n Trees        |          | 37.8702       | 85°    | 37.870285 °   |  |  |
| item        |                                   |                |          | -121.329822 ° |        | -121.329822 ° |  |  |
| DWR ID      | DWR_RD0                           | 544_01_f _ 201 | 4_92     |               |        |               |  |  |
|             |                                   | Comn           | nent Cod | de            |        |               |  |  |
| T1 : Trim t | rees to at I                      | east five feet | above g  | round level   | •      |               |  |  |
|             |                                   | Inspecto       | or Comm  | nent          |        |               |  |  |
| Untrimmed   | Untrimmed tree on landside slope. |                |          |               |        |               |  |  |
|             |                                   |                |          |               |        |               |  |  |
|             |                                   |                |          |               |        |               |  |  |



Looking southwest at untrimmed tree on landward slope.

| LM Start               | 0.06                       | Rating **    | U                      | Issue No.  |     | 118          |
|------------------------|----------------------------|--------------|------------------------|------------|-----|--------------|
| LM End                 | 0.06                       | Issue Type + | Ma                     | Location * |     | LS           |
| Category Earthen Levee |                            |              | GPS Latitude/Longitude |            |     |              |
| Calegory               |                            |              |                        | Start      |     | End          |
| Item                   | Erosion /                  | Bank Caving  |                        | 37.8695    | 70° | 37.869570°   |
| пеш                    |                            |              |                        | -121.3295  | 56° | -121.329556° |
| DWR ID                 | DWR_RD0544_01_f _ 2015_118 |              |                        |            |     |              |

#### Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

Finger erosion noted on landside slope.

# Photo 1 of 1 : FA\_2018\_RD0544\_108\_118\_20180906\_00084.jpg



Looking west at landside erosion for shoulder to middle of levee slope.

| LM Start | 0.26      | Rating **      | М        | Issue No.           |     | 101          |   |
|----------|-----------|----------------|----------|---------------------|-----|--------------|---|
| LM End   | 0.34      | Issue Type +   | Ma       | Location *          |     | CR           |   |
| Category | Earthen L | then Levee     |          | GPS Latitude/Longit |     | le/Longitude |   |
| Category |           |                |          | Start               |     | End          |   |
| Item     |           | rface / Depres | ssions / | 37.8671             | 48° | 37.866036    | 0 |
| item     | Rutting   |                |          | -121.3277           | 97° | -121.327862  | 0 |
| DWR ID   | DWR_RD0   | 544_01_s _ 201 | 6_101    |                     |     |              |   |
|          |           | Comn           | nent Cod | le                  |     |              |   |

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

Page 2 of 57

| * Location     |                     | ** Rating                |   | + Issue Type                      |
|----------------|---------------------|--------------------------|---|-----------------------------------|
| LS: Land Side  | N/A: Not Applicable | A : Acceptable           | N : Not Inspected/Rated                 | Ma : Maintenance Deficiancy       |
| WS: Water Side |                     | M : Minimally Acceptable | C : Corrected                           | Ob : Design & System Obsolescence |
| CR : Crown     |                     | U : Unacceptable         | A/W : Acceptable but Monitor & Maintain | En : Enforcement                  |

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

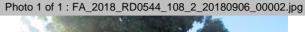
# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 0.42         | Rating **       | М        | Issue No.    | 2    |               |  |
|--------------|--------------|-----------------|----------|--------------|------|---------------|--|
| LM End       | 0.42         | Issue Type +    | Ma       | Location *   | LS   |               |  |
| Category     | evee         | GPS La          | atitud   | le/Longitude |      |               |  |
| Calegory     |              |                 |          | Start        |      | End           |  |
| Item         | Trim / Thi   | n Trees         |          | 37.8649      | 58°  | 37.864958 °   |  |
| пеш          |              |                 |          | -121.3271    | 42 ° | -121.327142 ° |  |
| DWR ID       | DWR_RD0      | 544_01_s _ 201  | 2_2      |              |      |               |  |
| Comment Code |              |                 |          |              |      |               |  |
| T2: Thin t   | rees to allo | w visibility of | the arou | nd and roor  | n to | flood fight.  |  |

#### Inspector Comment

Large untrimmed tree on landside slope.





Looking southwest at untrimmed tree on landward slope.

| LM Start | 0.48      | Rating **                | U  | Issue No.  |        | 3           |  |  |
|----------|-----------|--------------------------|----|------------|--------|-------------|--|--|
| LM End   | 0.67      | Issue Type +             | Ma | Location * |        | WS          |  |  |
| Category | Earthen L | evee                     |    | GPS La     | atitud | e/Longitude |  |  |
| Calegory |           |                          |    | Start      |        | End         |  |  |
| Item     | Vegetatio | n                        |    | 37.8645    | 78°    | 37.863753   |  |  |
| пеш      |           |                          |    | -121.3262  | 10°    | -121.322835 |  |  |
| DWR ID   | DWR_RD0   | DWR_RD0544_01_s _ 2012_3 |    |            |        |             |  |  |

#### Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

Dense vegetation on waterside and landside slopes.

| LM Start | 0.48 | Rating **    | U  | Issue No.  | 3 (cont) |
|----------|------|--------------|----|------------|----------|
| LM End   | 0.67 | Issue Type + | Ma | Location * | WS       |

#### Photo 1 of 2: FA\_2018\_RD0544\_108\_3\_20180906\_00003.jpg



Looking southeast at the waterside slope.

Photo 2 of 2: FA\_2018\_RD0544\_108\_3\_20180906\_00004.jpg



Looking south at dense veg on waterward slope.

Location + Issue Type : Acceptable : Minimally Acceptable Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 0.55         | Rating **      | М        | Issue No.    | 61   |               |  |  |
|------------|--------------|----------------|----------|--------------|------|---------------|--|--|
| LM End     | 0.63         | Issue Type +   | Ma       | Location *   | CR   |               |  |  |
| Category   | evee         | GPS La         | titud    | le/Longitude |      |               |  |  |
| Calegory   |              |                | Start    |              | End  |               |  |  |
| Item       |              | rface / Depres | ssions / | 37.8643      | 59°  | 37.864011 °   |  |  |
| пеш        | Rutting      |                |          | -121.32493   | 39°  | -121.323562 ° |  |  |
| DWR ID     | DWR_RD0      | 544_01_f _ 201 | 3_61     |              |      |               |  |  |
|            | Comment Code |                |          |              |      |               |  |  |
| C1 . Add a | ioto         | motorial and   | ** a** d | the levee t  | a h. | ing the erous |  |  |

C1 : Add appropriate material and re-grade the levee to bring the crown above the design elevation.

Inspector Comment

No Photos

| LM Start | 0.64         | Rating **      | A/W  | Issue No.  |                        | 75            |  |  |
|----------|--------------|----------------|------|------------|------------------------|---------------|--|--|
| LM End   | 0.64         | Issue Type +   | Ma   | Location * |                        |               |  |  |
| Category | Supplemental |                |      |            | GPS Latitude/Longitude |               |  |  |
| Calegory |              |                |      | Start      |                        | End           |  |  |
| Item     | 2017 Stor    | m Damage       |      | 37.86390   | o°                     | 37.863900°    |  |  |
| item     |              |                |      | -121.32350 | 0 °                    | -121.323400 ° |  |  |
| DWR ID   | DWR_RD0      | 544_01_f _ 201 | 7_75 |            |                        |               |  |  |
|          | Comment Code |                |      |            |                        |               |  |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:571

Site Designation:LMA-477 Repair Type: Erosion

Rating:Area of Concern Field Date:8/10/2017

Notes:



\* Location

LS : Land Side N/A : Not Applicable

WS: Water Side
CR: Crown

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.64         | Rating **              | A/W | Issue No.  |     | 75 (cont)    |  |  |
|----------|--------------|------------------------|-----|------------|-----|--------------|--|--|
| LM End   | 0.64         | Issue Type +           | Ма  | Location * |     |              |  |  |
| Category | Suppleme     | GPS Latitude/Longitude |     |            |     |              |  |  |
| Calegory |              |                        |     | Start      |     | End          |  |  |
| Item     | 2017 Stor    | m Damage               |     | 37.86390   | 00° | 37.863900°   |  |  |
| пеш      |              |                        |     | -121.32350 | 00° | -121.323400° |  |  |
| DWR ID   | DWR_RD0      | 0544_01_f _ 2017_75    |     |            |     |              |  |  |
|          | Comment Code |                        |     |            |     |              |  |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:571

Site Designation:LMA-477 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

| LM Start | 0.64 | Rating **    | A/W | Issue No.  | 75 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 0.64 | Issue Type + | Ма  | Location * |           |



Photo 3 of 3: LEVAL\_FA\_2018\_571\_4487.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start    | 0.78         | Rating **      | М        | Issue No.    |        | 73           |  |  |  |
|-------------|--------------|----------------|----------|--------------|--------|--------------|--|--|--|
| LM End      | 0.78         | Issue Type +   | Ma       | Location *   |        | WS           |  |  |  |
| Category    | Earthen L    | evee           |          | GPS La       | atitud | e/Longitude  |  |  |  |
| Calegory    |              |                |          | Start        |        | End          |  |  |  |
| Item        | Trim / Thi   | n Trees        |          | 37.8630      | 16°    | 37.863016°   |  |  |  |
| пеш         |              |                |          | -121.3211    | 37°    | -121.321137° |  |  |  |
| DWR ID      | DWR_RD0      | 544_01_f _ 201 | 3_73     |              |        |              |  |  |  |
|             |              | Comn           | nent Cod | de           |        |              |  |  |  |
| T1 : Trim t | rees to at I | east five feet | above g  | round level. |        |              |  |  |  |
|             |              |                |          |              |        |              |  |  |  |
|             |              | Inspecto       | or Comm  | nent         |        |              |  |  |  |
|             |              |                |          |              |        |              |  |  |  |
|             |              |                |          |              |        |              |  |  |  |
|             |              |                |          |              |        |              |  |  |  |

No Photos

| LM Start   | 0.81              | Rating **      | М        | Issue No.     |        | 93           |  |
|------------|-------------------|----------------|----------|---------------|--------|--------------|--|
| LM End     | 0.81              | Issue Type +   | Ma       | Location *    |        | LS           |  |
| Category   | Earthen L         | evee           |          | GPS La        | atitud | e/Longitude  |  |
| Category   | Category          |                |          |               |        | End          |  |
| Item       | Trim / Thi        | n Trees        |          | 37.862694°    |        | 37.862694°   |  |
| пеш        |                   |                |          | -121.320887 ° |        | -121.320887° |  |
| DWR ID     | DWR_RD0           | 544_01_f _ 201 | 4_93     |               |        |              |  |
|            |                   | Comn           | nent Cod | le            |        |              |  |
| T1: Trim t | rees to at I      | east five feet | above g  | round level   |        |              |  |
|            |                   |                |          |               |        |              |  |
|            | Inspector Comment |                |          |               |        |              |  |



Looking west at untrimmed trees on landward slope and toe fall 2015.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.99                      | Rating **              | A/W | Issue No.  |     | 77           |  |
|----------|---------------------------|------------------------|-----|------------|-----|--------------|--|
| LM End   | 1.02                      | Issue Type +           | Ma  | Location * | 1 * |              |  |
| Category | ental                     | GPS Latitude/Longitude |     |            |     |              |  |
| Calegory |                           |                        |     | Start      |     | End          |  |
| Item     | 2017 Stor                 | m Damage               |     | 37.86040   | 00° | 37.860200°   |  |
| пеш      |                           |                        |     | -121.32030 | 00° | -121.319700° |  |
| DWR ID   | DWR_RD0544_01_f _ 2017_77 |                        |     |            |     |              |  |
|          | Comment Code              |                        |     |            |     |              |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:570

Site Designation:LMA-476 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

| LM Start | 0.99 | Rating **    | A/W | Issue No.  | 77 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 1.02 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_570\_4598.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.99                        | <b>0.99</b> Rating ** A/W |    |            |     | 77 (cont)    |  |
|----------|-----------------------------|---------------------------|----|------------|-----|--------------|--|
| LM End   | 1.02                        | Issue Type +              | Ma | Location * | n * |              |  |
| Category | ental                       | GPS Latitude/Longitude    |    |            |     |              |  |
| Calegory |                             |                           |    | Start      |     | End          |  |
| Item     | 2017 Stor                   | m Damage                  |    | 37.8604    | 00° | 37.860200°   |  |
| пеш      |                             |                           |    | -121.3203  | 00° | -121.319700° |  |
| DWR ID   | D DWR_RD0544_01_f _ 2017_77 |                           |    |            |     |              |  |
|          | Comment Code                |                           |    |            |     |              |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:570

Site Designation:LMA-476 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:



| LM Start                         | 1.12       | Rating **              | М  | Issue No.  |     | 39           |  |
|----------------------------------|------------|------------------------|----|------------|-----|--------------|--|
| LM End                           | 1.12       | Issue Type +           | Ма | Location * | LS  |              |  |
| Category                         | evee       | GPS Latitude/Longitude |    |            |     |              |  |
| Category                         |            |                        |    | Start      |     | End          |  |
| Item                             | Trim / Thi | n Trees                |    | 37.8594    | 23° | 37.859423°   |  |
| пеш                              |            |                        |    | -121.3183  | 28° | -121.318328° |  |
| DWR ID DWR_RD0544_01_s _ 2012_39 |            |                        |    |            |     |              |  |
| Comment Code                     |            |                        |    |            |     |              |  |

#### T1: Trim trees to at least five feet above ground level.

#### Inspector Comment

Untrimmed trees on landside slope.

#### Photo 1 of 2: FA\_2018\_RD0544\_108\_39\_20180906\_00031.jpg



Looking southwest at landside slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM End E                           | 1.12                   | Jacus Type I   |          |              |        | 39 (cont)   |  |
|------------------------------------|------------------------|----------------|----------|--------------|--------|-------------|--|
|                                    |                        | Issue Type +   | Ma       | Location *   |        | LS          |  |
|                                    | Earthen L              | evee           |          | GPS La       | atitud | e/Longitude |  |
| Jalogory                           |                        |                |          | Start        |        | End         |  |
| Item 7                             | Trim / Thir            | n Trees        |          | 37.8594      | 23 °   | 37.859423°  |  |
| item                               | -121.318328 ° -121.318 |                |          |              |        |             |  |
| DWR ID DWR_RD0544_01_s _ 2012_39   |                        |                |          |              |        |             |  |
|                                    |                        | Comn           | nent Cod | de           |        |             |  |
| T1 : Trim tre                      | ees to at I            | east five feet | above g  | round level. |        |             |  |
|                                    |                        | Inspecto       | or Comm  | nent         |        |             |  |
| Untrimmed trees on landside slope. |                        |                |          |              |        |             |  |
|                                    |                        |                |          |              |        |             |  |
|                                    |                        |                |          |              |        |             |  |



Looking southwest at untrimmed tree on landward slope.

| LM Start                         | 1.19         | Rating **    | М  | Issue No.              |     | 12            |  |  |
|----------------------------------|--------------|--------------|----|------------------------|-----|---------------|--|--|
| LM End                           | 1.19         | Issue Type + | Ma | Location *             | LS  |               |  |  |
| Category Earthen Levee           |              |              |    | GPS Latitude/Longitude |     |               |  |  |
| Calegory                         |              |              |    | Start                  |     | End           |  |  |
| Item                             | Vegetatio    | n            |    | 37.85848               | 89° | 37.858489°    |  |  |
| пеш                              |              |              |    | -121.31874             | 13° | -121.318743 ° |  |  |
| DWR ID DWR_RD0544_01_s _ 2018_12 |              |              |    |                        |     |               |  |  |
|                                  | Commont Codo |              |    |                        |     |               |  |  |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

| LM Start | 1.29                   | Rating **      | М        | Issue No.  |                        | 89          |   |  |  |
|----------|------------------------|----------------|----------|------------|------------------------|-------------|---|--|--|
| LM End   | 1.29                   | Issue Type +   | Ма       | Location * |                        | LS          |   |  |  |
| Cotogony | Category Earthen Levee |                |          |            | GPS Latitude/Longitude |             |   |  |  |
| Calegory |                        |                |          |            |                        | End         |   |  |  |
| Item     | Trim / Thi             | n Trees        |          | 37.8573    | 21°                    | 37.857321   | 0 |  |  |
| пеш      |                        |                |          | -121.3199  | 43°                    | -121.319943 | 0 |  |  |
| DWR ID   | DWR_RD0                | 544_01_s _ 201 | 4_89     |            |                        | ,           |   |  |  |
|          |                        | Comn           | nent Coc | de         |                        |             |   |  |  |

T1: Trim trees to at least five feet above ground level.

Inspector Comment



Looking southwest at dense veg on landward slope and toe.

Location LS : Land Side WS: Water Side

N/A: Not Applicable

U : Unacceptable

A : Acceptable M : Minimally Acceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 1.44         | Rating **      | U        | Issue No.    |        | 42           |  |
|----------------------------------|--------------|----------------|----------|--------------|--------|--------------|--|
| LM End                           | 1.44         | Issue Type +   | Ma       | Location *   |        | LS           |  |
| Category                         | Earthen L    | evee           |          | GPS La       | atitud | le/Longitude |  |
| Category                         |              |                |          | Start        |        | End          |  |
| Item                             | Trim / Thi   | n Trees        |          | 37.8556      | 17°    | 37.855617°   |  |
| пеш                              |              |                |          | -121.3211    | 57°    | -121.321157° |  |
| DWR ID DWR_RD0544_01_f _ 2018_42 |              |                |          |              |        |              |  |
|                                  |              | Comn           | nent Cod | de           |        |              |  |
| T1: Trim t                       | rees to at I | east five feet | above g  | round level. |        |              |  |
|                                  |              |                |          |              |        |              |  |
|                                  |              | Inspecto       | or Comm  | nent         |        |              |  |
|                                  |              |                |          |              |        |              |  |
|                                  |              |                |          |              |        |              |  |
|                                  |              |                |          |              |        |              |  |
|                                  |              |                |          |              |        |              |  |



Looking at untrimmed tree at landward toe. (Fall 2018)

| LM Start | 1.44              | Rating **              | N     | Issue No.  |            | 14           |  |  |
|----------|-------------------|------------------------|-------|------------|------------|--------------|--|--|
| LM End   | 1.44              | Issue Type +           | Ma    | Location * |            | WS           |  |  |
| Category | evee              | GPS Latitude/Longitude |       |            |            |              |  |  |
| Calegory |                   |                        | Start |            | End        |              |  |  |
| Item     | Trim / Thin Trees |                        |       |            | 37.855583° |              |  |  |
| item     |                   |                        |       | -121.3211  | 77°        | -121.321177° |  |  |
| DWR ID   | DWR_RD0           | 544_01_s _ 201         | 2_14  |            |            |              |  |  |
|          | Comment Code      |                        |       |            |            |              |  |  |

T5: Tree stumps.

Inspector Comment

No Photos

| LM Start   | 1.46   | Rating **      | М        | Issue No.  | 87                     |              |  |  |  |
|------------|--|----------------|----------|------------|------------------------|--------------|--|--|--|
| LM End     | 1.48   | Issue Type +   | Ма       | Location * |                        | LS           |  |  |  |
| Catagory   | Category Earthen Levee                                   |                |          |            | GPS Latitude/Longitude |              |  |  |  |
| Category   |  |                |          | Start      |                        | End          |  |  |  |
| Item       | Trim / Thin Trees  |                | 37.85541 | 6°         | 37.855043°             |              |  |  |  |
| item       |  |                |          | -121.32117 | 71 °                   | -121.321122° |  |  |  |
| DWR ID     | DWR_RD0  | 544_01_s _ 201 | 5_87     |            |                        |              |  |  |  |
|            |  | Comn           | nent Cod | le         |                        |              |  |  |  |
| T1: Trim t | 1 : Trim trees to at least five feet above ground level. |                |          |            |                        |              |  |  |  |

Inspector Comment



Looking west at untrimmed tree at landward toe fall 2015.

\* Location

N/A: Not Applicable

LS: Land Side WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 1.50   | Rating **      | М        | Issue No.     | 119 |               |  |  |
|----------|--|----------------|----------|---------------|-----|---------------|--|--|
| LM End   | 1.51   | Issue Type +   | Ma       | Location *    | WS  |               |  |  |
| Category | Earthen Levee GPS Latitude/Longitude   |                |          |               |     |               |  |  |
| Calegory |  | Start          |          | End           |     |               |  |  |
| Item     | Slope Stability  |                |          |               | 44° | 37.854564°    |  |  |
| пеш      |  |                |          | -121.321090 ° |     | -121.321031 ° |  |  |
| DWR ID   | DWR_RD0  | 544_01_f _ 201 | 5_119    |               |     |               |  |  |
|          |  | Comn           | nent Cod | de            |     |               |  |  |
|          | S2 : Repair the levee slope damaged by foot traffic and prevent access where possible. |                |          |               |     |               |  |  |
|          | Inspector Comment  |                |          |               |     |               |  |  |

Damaged levee slope due to fishermen using slope as a ramp.

| LM Start | 1.50 | Rating **    | М  | Issue No.  | 119 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End   | 1.51 | Issue Type + | Ma | Location * | WS         |



Looking southeast at damaged waterward slope fall 2015.

#### Photo 2 of 3: FA\_2018\_RD0544\_108\_119\_20180906\_00086.jpg



Looking east at damaged waterward slope fall 2015.

Photo 3 of 3: FA\_2018\_RD0544\_108\_119\_20180906\_00087.jpg

| LM Start | 1.50 | Rating **    | М  | Issue No.  | 119 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End   | 1.51 | Issue Type + | Ma | Location * | WS         |



Looking southeast at damaged waterward slope fall 2015

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
U: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 1.56        | Rating **    | U        | Issue No.   |        | 43            |  |  |
|-----------------------------------|-------------|--------------|----------|-------------|--------|---------------|--|--|
| LM End                            | 1.76        | Issue Type + | Ma       | Location *  |        | WS            |  |  |
| Category                          | Earthen L   | evee         |          | GPS La      | atitud | e/Longitude   |  |  |
| Calegory                          |             |              | Start    |             | End    |               |  |  |
| Item                              | Vegetatio   | n            |          | 37.8540     | 68°    | 37.853980 °   |  |  |
| пеш                               |             |              |          | -121.3213   | 87°    | -121.324213 ° |  |  |
| DWR ID DWR_RD0544_01_s _ 2012_43  |             |              |          |             |        |               |  |  |
|                                   |             | Comn         | nent Cod | de          |        |               |  |  |
| V2 : Remo                         | ve the wild | growth other | than na  | tive grasse | s froi | m the levee   |  |  |
|                                   |             | Inspecto     | or Comm  | nent        |        |               |  |  |
| Dense vegetation waterside slope. |             |              |          |             |        |               |  |  |
|                                   |             |              |          |             |        |               |  |  |
|                                   |             |              |          |             |        |               |  |  |



Looking east at dense veg on waterward slope.

| LM Start | 1.59                             | Rating **    | М  | Issue No.  | 95   |               |  |  |
|----------|----------------------------------|--------------|----|------------|------|---------------|--|--|
| LM End   | 1.59                             | Issue Type + | Ma | Location * | LS   |               |  |  |
| Category | Catagory Earthen Levee           |              |    |            |      | e/Longitude   |  |  |
| Calegory | Category                         |              |    |            |      | End           |  |  |
| Item     | Trim / Thi                       | n Trees      |    | 37.8542    | 99°  | 37.854299 °   |  |  |
| пеш      |                                  |              |    | -121.3218  | 65 ° | -121.321865 ° |  |  |
| DWR ID   | DWR ID DWR_RD0544_01_s _ 2018_95 |              |    |            |      |               |  |  |
|          | Comment Code                     |              |    |            |      |               |  |  |
|          |                                  |              |    |            |      |               |  |  |

T1 : Trim trees to at least five feet above ground level.

#### Inspector Comment

Untrimmed tree on landside slope.



Looking southwest at untrimmed tree on landward slope.

| LM Start | 1.63      | Rating **      | С        | Issue No.     |        | 79           |   |
|----------|-----------|----------------|----------|---------------|--------|--------------|---|
| LM End   | 1.63      | Issue Type +   | Ma       | Ma Location * |        | WS           |   |
| Category | Earthen L | evee           |          | GPS La        | atitud | le/Longitude |   |
| Calegory | alegory   |                |          |               |        | End          |   |
| Item     | Encroach  | ments          |          | 37.8545       | 98°    | 37.854598    | 0 |
| item     |           |                |          | -121.3223     | 20°    | -121.322320  | 0 |
| DWR ID   | DWR_RD0   | 544_01_s _ 201 | 7_79     |               |        |              |   |
|          |           | Comn           | nent Cod | le            |        |              |   |
|          |           |                |          |               |        |              |   |

GA: Garbage

#### Inspector Comment

Remove abandoned stairs to boat dock.

No Photos

| * Location   | ** Rating  |   | + Issue Type   |
|--|--|---|--|
| LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                             | 1.63 | Rating **            | U                      | Issue No.   |              | 146          |
|--------------------------------------|------|----------------------|------------------------|-------------|--------------|--------------|
| LM End                               | 1.63 | Issue Type +         | Ma                     | Location *  |              | LS           |
| Category Earthen Levee               |      |                      | GPS Latitude/Longitude |             |              |              |
| Category                             |      |                      | Start                  |             | End          |              |
| Item Animal Control                  |      |                      | 37.8546                | 43°         | 37.854643°   |              |
|                                      |      |                      | -121.322429°           |             | -121.322429° |              |
| DWR ID DWR_RD0544_01_f _ 2017_146    |      |                      |                        |             |              |              |
|                                      |      | Comn                 | nent Cod               | de          |              |              |
| A3 : No ro compact o                 |      | le, but rodent rows. | burrows                | visible; ne | ed to        | backfill and |
|                                      |      | Inspecto             | or Comm                | nent        |              |              |
| Large rodent hole on landside slope. |      |                      |                        |             |              |              |
|                                      |      |                      |                        |             |              |              |
|                                      |      |                      |                        |             |              |              |
|                                      |      |                      |                        |             |              |              |



Looking east at the landside slope.

| LM Start               | 1.64                              | Rating **      | М                      | Issue No.   |            | 145           |  |
|------------------------|-----------------------------------|----------------|------------------------|-------------|------------|---------------|--|
| LM End                 | 1.64                              | Issue Type +   | Ma                     | Location *  | LS         |               |  |
| Category Earthen Levee |                                   |                | GPS Latitude/Longitude |             |            |               |  |
| Category               |                                   |                |                        | Start       |            | End           |  |
| Trim / Thin Trees      |                                   |                | 37.854673°             |             | 37.854673° |               |  |
| пеш                    |                                   |                |                        | -121.3224   | 92°        | -121.322492 ° |  |
| DWR ID                 | DWR ID DWR_RD0544_01_f _ 2017_145 |                |                        |             |            |               |  |
| Comment Code           |                                   |                |                        |             |            |               |  |
| T1 · Trim +            | roop to ot l                      | aget five foot | ahaya a                | round lovel |            |               |  |

T1 : Trim trees to at least five feet above ground level.

Inspector Comment



Looking northwest at the landside slope.

|          | LM Start  | 1.78                   | Rating **      | М          | Issue No.  |                        | 88          |   |  |  |
|----------|---|------------------------|----------------|------------|------------|------------------------|-------------|---|--|--|
|          | LM End  | 1.78                   | Issue Type +   | Ma         | Location * | LS                     |             |   |  |  |
|          | Category  | Category Earthen Levee |                |            |            | GPS Latitude/Longitude |             |   |  |  |
| Category |   |                        |                | Start      |            | End                    |             |   |  |  |
|          | Trim / Thin Trees   |                        |                | 37.853770° |            | 37.853770              | 0           |   |  |  |
|          | itom  |                        |                |            | -121.3242  | 93°                    | -121.324293 | 0 |  |  |
|          | DWR ID  | DWR_RD0                | 544_01_s _ 201 | 5_88       |            |                        |             |   |  |  |
|          | Comment Code  |                        |                |            |            |                        |             |   |  |  |
|          | T1 : Trim trees to at least five feet above ground level. |                        |                |            |            |                        |             |   |  |  |

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 1.82                  | Rating **      | U                      | Issue No.     |     | 80           |
|--|-----------------------|----------------|------------------------|---------------|-----|--------------|
| LM End   | 1.82                  | Issue Type +   | Ma                     | Location *    | LS  |              |
| Category Earthen Levee   |                       |                | GPS Latitude/Longitude |               |     |              |
|  |                       |                | Start                  |               | End |              |
| Item   | Erosion / Bank Caving |                |                        | 37.853173°    |     | 37.853173°   |
| item   |                       |                |                        | -121.324145 ° |     | -121.324145° |
| DWR ID   | DWR_RD0               | 544_01_s _ 201 | 7_80                   |               |     |              |
| Comment Code   |                       |                |                        |               |     |              |
| E2 : Schedule repair of erosion site prior to the next inspection. |                       |                |                        |               |     |              |

Inspector Comment

Repair slope damage due to water runoff.





Looking west at slope damage due to rain runoff on waterward slope.

Photo 2 of 2: FA\_2018\_RD0544\_108\_80\_20180906\_00058.jpg



Looking south at slope damage due to rain runoff on waterward slope.

| LM Start                 | 1.88           | Rating **      | М             | Issue No.              |              | 81         |  |
|--------------------------|----------------|----------------|---------------|------------------------|--------------|------------|--|
| LM End                   | 1.88           | Issue Type +   | Ma            | Location *             |              | LS         |  |
| Category Earthen Levee   |                |                |               | GPS Latitude/Longitude |              |            |  |
| Category                 |                |                |               | Start                  |              | End        |  |
| Item                     | Animal Control |                |               | 37.8523                | 27°          | 37.852327° |  |
| Rem                      |                |                | -121.323767 ° |                        | -121.323767° |            |  |
| DWR ID                   | DWR_RD0        | 544_01_f _ 201 | 7_81          |                        |              |            |  |
|                          |                | Comn           | nent Cod      | de                     |              |            |  |
| A1 : Exterr              | minate rod     | ents and back  | fill and o    | compact or             | grou         | t burrows. |  |
| Inspector Comment        |                |                |               |                        |              |            |  |
| Active rodents on levee. |                |                |               |                        |              |            |  |

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 1.89              | Rating **    | A/W                    | Issue No.  | 127 |              |
|-----------------------------------|-------------------|--------------|------------------------|------------|-----|--------------|
| LM End                            | 1.91              | Issue Type + | Ma                     | Location * |     |              |
| Category Supplemental             |                   |              | GPS Latitude/Longitude |            |     |              |
|                                   |                   |              | Start                  |            | End |              |
| Item                              | 2017 Storm Damage |              |                        | 37.8523    | 00° | 37.852000°   |
| Item                              |                   |              |                        | -121.3237  | 00° | -121.323600° |
| DWR ID DWR_RD0544_01_f _ 2017_127 |                   |              |                        |            | ·   |              |
| Comment Code                      |                   |              |                        |            |     |              |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:569 Site Designation:LMA-475 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

| LM Start | 1.89 | Rating **    | A/W | Issue No.  | 127 (cont)  |
|----------|------|--------------|-----|------------|-------------|
|          |      |              |     |            | 121 (00111) |
| LM End   | 1.91 | Issue Type + | Ma  | Location * |             |



Photo 2 of 3: LEVAL\_FA\_2018\_569\_4615.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 1.89                              | Rating **    | A/W   | Issue No.              | 127 (cont) |               |  |
|--------------|-----------------------------------|--------------|-------|------------------------|------------|---------------|--|
| LM End       | 1.91                              | Issue Type + | Ма    | Location *             |            |               |  |
| Category     |                                   |              |       | GPS Latitude/Longitude |            |               |  |
| Calegory     |                                   |              | Start |                        | End        |               |  |
| Item         | 2017 Storm Damage                 |              |       | 37.8523                | 00°        | 37.852000°    |  |
| пеш          |                                   |              |       | -121.3237              | 00°        | -121.323600 ° |  |
| DWR ID       | DWR ID DWR_RD0544_01_f _ 2017_127 |              |       |                        |            |               |  |
| Comment Code |                                   |              |       |                        |            |               |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:569

Site Designation:LMA-475 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:



| LM Start               | 2.25    | Rating **      | M          | Issue No.              | 82         |               |  |
|------------------------|---------|----------------|------------|------------------------|------------|---------------|--|
| LM End                 | 2.25    | Issue Type +   | Ma         | Location *             | LS         |               |  |
| Category Earthen Levee |         |                |            | GPS Latitude/Longitude |            |               |  |
|                        |         |                |            | Start                  |            | End           |  |
| ltem Encroachments     |         |                | 37.848302° |                        | 37.848302° |               |  |
| пеш                    |         |                |            | -121.3248              | 77 °       | -121.324877 ° |  |
| DWR ID                 | DWR_RD0 | 544_01_s _ 201 | 7_82       |                        |            |               |  |
| Comment Code           |         |                |            |                        |            |               |  |
| EQ : Equipment         |         |                |            |                        |            |               |  |

Inspector Comment

Old irrigation pipe.

Photo 1 of 1: FA\_2018\_RD0544\_108\_82\_20180906\_00059.jpg



Looking southwest at old irriagtion pipe on landward shoulder.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 2.25        | Rating **       | U             | Issue No.   |               | 23           |  |
|--|-------------|-----------------|---------------|-------------|---------------|--------------|--|
| LM End   | 2.25        | Issue Type +    | Ma            | Location *  |               | LS           |  |
| Earthen Levee  |             |                 |               | GPS La      | atitud        | le/Longitude |  |
| Category   |             |                 |               | Start       |               | End          |  |
| Item   | Erosion / I |                 | 37.8481       | 98°         | 37.848198°    |              |  |
| item   |             |                 | -121.324802 ° |             | -121.324802 ° |              |  |
| DWR ID DWR_RD0544_01_s _ 2012_23                         |             |                 |               |             |               |              |  |
| Comment Code   |             |                 |               |             |               |              |  |
| E2 : Sched   | dule repair | of erosion site | e prior to    | the next in | spe           | ction.       |  |
| Inspector Comment  |             |                 |               |             |               |              |  |
| Caving/erosion around irrigation pipe on landside slope. |             |                 |               |             |               |              |  |
|  |             |                 |               |             |               |              |  |
|  |             |                 |               |             |               |              |  |
|  |             |                 |               |             |               |              |  |

| Photo 1 of 3: FA_2018_RD0544_108_23_20180906_00022.jpg | ) |
|--|---|
|  |   |
|  |   |
| CAVA   |   |
|  |   |
|  |   |
|  |   |
| 是超了一个人。<br>第一个人  |   |
|  |   |
|  |   |
|  |   |
|  |   |

Looking south at erosion around irriagation pipe on landside slope. (Fall 2014)

 LM Start
 2.25
 Rating \*\*
 U
 Issue No.
 23 (cont)

 LM End
 2.25
 Issue Type +
 Ma
 Location \*
 LS

Photo 2 of 3: FA\_2018\_RD0544\_108\_23\_20180906\_00023.jpg



Looking north at erosion under irrigation pipe on landside slope.

| LM Start | 2.25 | Rating **    | U  | Issue No.  | 23 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.25 | Issue Type + | Ma | Location * | LS        |



Looking east at erosion under irrigation pipe on landside slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable A: Acceptable M: Not Inspected/Rated M: Minimally Acceptable CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                           | 2.26         | Rating **       | М        | Issue No.     |            | 98           |  |  |
|------------------------------------|--------------|-----------------|----------|---------------|------------|--------------|--|--|
| LM End                             | 2.31         | Issue Type +    | Ma       | Location *    |            | LS           |  |  |
| Category                           | Earthen L    | evee            |          | GPS La        | atitud     | e/Longitude  |  |  |
| Calegory                           |              |                 | Start    |               | End        |              |  |  |
| Item                               | Trim / Thi   |                 | 37.8480  | )21 °         | 37.847343° |              |  |  |
| item                               |              |                 |          | -121.324839 ° |            | -121.324672° |  |  |
| DWR ID DWR_RD0544_01_f _ 2014_98   |              |                 |          |               |            |              |  |  |
|                                    |              | Comn            | nent Cod | de            |            |              |  |  |
| T2 : Thin t                        | rees to allo | w visibility of | the grou | nd and roo    | m to       | flood fight. |  |  |
|                                    |              |                 |          |               |            |              |  |  |
| Inspector Comment                  |              |                 |          |               |            |              |  |  |
| Untrimmed trees on landside slope. |              |                 |          |               |            |              |  |  |
|                                    |              |                 |          |               |            |              |  |  |
|                                    |              |                 |          |               |            |              |  |  |



Looking south at untrimmed trees on landward slope.

| LM Start               | 2.27                             | Rating **    | U  | Issue No.              |     | 44            |  |  |  |
|------------------------|----------------------------------|--------------|----|------------------------|-----|---------------|--|--|--|
| LM End                 | 2.27                             | Issue Type + | Ma | Location *             |     | LS            |  |  |  |
| Category Earthen Levee |                                  |              |    | GPS Latitude/Longitude |     |               |  |  |  |
| Calegory               |                                  |              |    | Start                  |     | End           |  |  |  |
| Erosion / Bank Caving  |                                  |              |    | 37.847990°             |     | 37.847990 °   |  |  |  |
| пеш                    |                                  |              |    | -121.3248              | 97° | -121.324897 ° |  |  |  |
| DWR ID                 | DWR ID DWR_RD0544_01_f _ 2018_44 |              |    |                        |     |               |  |  |  |
| Comment Code           |                                  |              |    |                        |     |               |  |  |  |
|                        |                                  |              |    |                        |     |               |  |  |  |

E2: Schedule repair of erosion site prior to the next inspection.

#### Inspector Comment

erosion around irrigation pipe on landward slope.

| LM Start | 2.27 | Rating **    | U  | Issue No.  | 44 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.27 | Issue Type + | Ma | Location * | LS        |

# Photo 1 of 3: FA\_2018\_RD0544\_108\_44\_20180919\_00175.jpg



Photo 2 of 3: FA\_2018\_RD0544\_108\_44\_20180919\_00174.jpg



Looking northwest at erosion around irrigation pipe on landward slope. (Fall 2018)

| * Location   | ** Rating  |   | + Issue Type   |
|--|--|---|--|
| LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 2.27                  | Rating **    | U        | Issue No.  |        | 44 (cont)     |  |
|--|-----------------------|--------------|----------|------------|--------|---------------|--|
| LM End   | 2.27                  | Issue Type + | Ma       | Location * |        | LS            |  |
| Category   | Earthen L             | evee         |          | GPS La     | atitud | e/Longitude   |  |
| Calegory   |                       |              |          | Start      |        | End           |  |
| Item   | Erosion / Bank Caving |              |          |            | 90°    | 37.847990°    |  |
| item   |                       |              |          | -121.3248  | 97°    | -121.324897 ° |  |
| DWR ID DWR_RD0544_01_f _ 2018_44                                   |                       |              |          |            |        |               |  |
|  |                       | Comn         | nent Cod | de         |        |               |  |
| E2 : Schedule repair of erosion site prior to the next inspection. |                       |              |          |            |        |               |  |
| Inspector Comment  |                       |              |          |            |        |               |  |
| erosion around irrigation pipe on landward slope.                  |                       |              |          |            |        |               |  |
|  |                       |              |          |            |        |               |  |
|  |                       |              |          |            |        |               |  |
|  |                       |              |          |            |        |               |  |



Looking east at erosion around pipe. (Fall 2018)

| LM Start                        | 2.27 | Rating **              | M             | Issue No.  |               | 8          |  |
|---------------------------------|------|------------------------|---------------|------------|---------------|------------|--|
| LM End                          | 2.33 | Issue Type +           | Ma            | Location * |               | LS         |  |
| Category                        | evee | GPS Latitude/Longitude |               |            |               |            |  |
| Calegory                        |      |                        |               | Start      |               | End        |  |
| Animal Control                  |      |                        |               | 37.847973° |               | 37.847105° |  |
| item                            |      |                        | -121.324820 ° |            | -121.324577 ° |            |  |
| DWR ID DWR_RD0544_01_s _ 2012_8 |      |                        |               |            |               |            |  |

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

#### Inspector Comment



Looking southwest at several rodent holes on landward shoulder and slope.

| LM Start   | 2.30                          | Rating **    | A/W      | Issue No.  |                        | 90            |  |  |  |
|--|-------------------------------|--------------|----------|------------|------------------------|---------------|--|--|--|
| LM End   | 2.30                          | Issue Type + | Ма       | Location * |                        | CR            |  |  |  |
| Category   | Earthen L                     | evee         |          | GPS La     | GPS Latitude/Longitude |               |  |  |  |
| Calegory   |                               |              |          | Start      |                        | End           |  |  |  |
| Item   | Crown Surface / Depressions / |              |          |            |                        | 37.847542°    |  |  |  |
| item   | Rutting                       |              |          | -121.3247  | 32°                    | -121.324732 ° |  |  |  |
| DWR ID DWR_RD0544_01_s _ 2017_90                       |                               |              |          |            |                        |               |  |  |  |
|  |                               | Comn         | nent Cod | le         |                        |               |  |  |  |
| C2 : Repair depressions or ruts in the crown or slope. |                               |              |          |            |                        |               |  |  |  |
| Inspector Comment                                      |                               |              |          |            |                        |               |  |  |  |
| Sinkhole forming in crown.                             |                               |              |          |            |                        |               |  |  |  |
|  | ·                             |              |          |            |                        |               |  |  |  |
|  |                               |              |          |            |                        |               |  |  |  |



Looking at sinkhole on levee crown.

| * Location   | ** Rating  |   | + Issue Type   |
|--|--|---|--|
| LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start          | 2.31                              | Rating **      | М        | Issue No.   |               | 149         |   |  |
|-------------------|-----------------------------------|----------------|----------|-------------|---------------|-------------|---|--|
| LM End            | 2.31                              | Issue Type +   | Ma       | Location *  |               | LS          |   |  |
| Category          | Earthen L                         | evee           |          | GPS La      | atitud        | e/Longitude |   |  |
| Calegory          |                                   |                |          | Start       |               | End         |   |  |
| Item              | Trim / Thi                        | n Trees        |          | 37.8473     | 27°           | 37.847327   | 0 |  |
| пеш               | tem                               |                |          |             | -121.324663 ° |             | ٥ |  |
| DWR ID            | DWR ID DWR_RD0544_01_f _ 2017_149 |                |          |             |               |             |   |  |
|                   |                                   | Comn           | nent Cod | de          |               |             |   |  |
| T1 : Trim t       | rees to at I                      | east five feet | above g  | round level |               |             |   |  |
| Inspector Comment |                                   |                |          |             |               |             |   |  |
|                   |                                   |                |          |             |               |             |   |  |
|                   |                                   |                |          |             |               |             |   |  |
|                   |                                   |                |          |             |               |             |   |  |

No Photos

| LM Start     | 2.31         | Rating **      | A/W | Issue No.              |      | 128           |  |  |  |
|--------------|--------------|----------------|-----|------------------------|------|---------------|--|--|--|
| LM End       | 2.35         | Issue Type +   | Ma  | Location *             |      |               |  |  |  |
| Category     | Supplemental |                |     | GPS Latitude/Longitude |      |               |  |  |  |
| Category     |              |                |     | Start                  |      | End           |  |  |  |
| Item         | 2017 Stor    | m Damage       |     | 37.8473                | 00°  | 37.846800°    |  |  |  |
| item         |              |                |     | -121.3247              | ° 00 | -121.324400 ° |  |  |  |
| DWR ID       | DWR_RD0      | 544_01_f _ 201 |     |                        |      |               |  |  |  |
| Comment Code |              |                |     |                        |      |               |  |  |  |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:568

Site Designation:LMA-474

Repair Type: Erosion

Rating:Area of Concern

Field Date:8/10/2017

Notes:



A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.31              | Rating **      | A/W        | Issue No.              |               | 128 (cont)  |
|----------|-------------------|----------------|------------|------------------------|---------------|-------------|
| LM End   | 2.35              | Issue Type +   | Ма         | Location *             |               |             |
| Category | Supplemental      |                |            | GPS Latitude/Longitude |               |             |
| Calegory | Category          |                |            |                        |               | End         |
| Item     | 2017 Storm Damage |                |            | 37.84730               | 00°           | 37.846800 ° |
| item     |                   |                | -121.32470 | 00°                    | -121.324400 ° |             |
| DWR ID   | DWR_RD0           | 544_01_f _ 201 | 7_128      |                        |               |             |

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:568

Site Designation:LMA-474 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

| LM Start | 2.31 | Rating **    | A/W | Issue No.  | 128 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 2.35 | Issue Type + | Ма  | Location * |            |





# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                               | 2.32       | Rating **     | U             | Issue No.  |              | 34          |  |  |  |
|--|------------|---------------|---------------|------------|--------------|-------------|--|--|--|
| LM End                                 | 2.36       | Issue Type +  | Ma            | Location * |              | LS          |  |  |  |
| Category                               | Earthen L  | evee          |               | GPS La     | atitud       | e/Longitude |  |  |  |
| Calegory                               |            |               |               | Start      |              | End         |  |  |  |
| Item                                   | 37.8472    | 92°           | 37.846743°    |            |              |             |  |  |  |
| item                                   |            |               | -121.324662 ° |            | -121.324336° |             |  |  |  |
| DWR ID DWR_RD0544_01_s _ 2012_34       |            |               |               |            |              |             |  |  |  |
|  |            | Comn          | nent Cod      | de         |              |             |  |  |  |
| A1 : Extern                            | ninate rod | ents and back | fill and o    | compact or | grou         | t burrows.  |  |  |  |
|  |            |               |               |            |              |             |  |  |  |
| Inspector Comment                      |            |               |               |            |              |             |  |  |  |
| Several rodent hole within this reach. |            |               |               |            |              |             |  |  |  |
|  |            |               |               |            |              |             |  |  |  |
|  |            |               |               |            |              |             |  |  |  |
|  |            |               |               |            |              |             |  |  |  |

Ма

Issue No.

Location \*

Rating \*\*

Issue Type +

LM Start

LM End

2.32

2.36

LS

Photo 1 of 3: FA\_2018\_RD0544\_108\_34\_20180906\_00027.jpg



Looking east at large rodent hole on landward slope.

34 (cont)

Photo 2 of 3: FA\_2018\_RD0544\_108\_34\_20180906\_00028.jpg



Looking south at several rodent holes on landward shoulder and slope.

| LM Start | 2.32 | Rating **    | U  | Issue No.  | 34 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.36 | Issue Type + | Ma | Location * | LS        |



Looking at rodent hole on levee crown.

\* Location + Issue Type Ma : Maintenance Deficiancy N/A: Not Applicable LS: Land Side : Acceptable : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence U : Unacceptable A/W : Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.33                          | Rating **      | U        | Issue No.     |        | 46           |  |
|----------------------------------|-------------------------------|----------------|----------|---------------|--------|--------------|--|
| LM End                           | 2.33                          | Issue Type +   | Ma       | Location *    |        | WS           |  |
| Category                         | Catagoria Earthen Levee       |                |          |               | atitud | e/Longitude  |  |
| Category                         |                               |                |          | Start         |        | End          |  |
| Item                             | Erosion / Bank Caving         |                |          | 37.8471       | 12 °   | 37.847112°   |  |
| пеш                              |                               |                |          | -121.324555 ° |        | -121.324555° |  |
| DWR ID DWR_RD0544_01_f _ 2018_46 |                               |                |          |               |        |              |  |
|                                  |                               | Comn           | nent Cod | de            |        |              |  |
| E1 : Note a                      | and monito                    | r erosion site |          |               |        |              |  |
|                                  |                               |                |          |               |        |              |  |
|                                  |                               | Inspecto       | or Comm  | nent          |        |              |  |
| Caving on                        | Caving on waterward shoulder. |                |          |               |        |              |  |
|                                  |                               |                |          |               |        |              |  |
|                                  |                               |                |          |               |        |              |  |
|                                  |                               |                |          |               |        |              |  |



Looking east at caving on waterward should and slope. (Fall 2018)

| LM Start | 2.43                      | Rating **              | U         | Issue No.  |               | 91          |   |
|----------|---------------------------|------------------------|-----------|------------|---------------|-------------|---|
| LM End   | 2.43                      | Issue Type +           | Ма        | Location * |               | LS          |   |
| Category | Earthen L                 | GPS Latitude/Longitude |           |            |               |             |   |
| Calegory |                           |                        |           | Start      |               | End         |   |
| Item     | Slope Sta                 | Slope Stability        |           |            | 73°           | 37.845973 ° | > |
| пеш      |                           |                        | -121.3233 | 73°        | -121.323373 ° | >           |   |
| DWR ID   | DWR_RD0544_01_s _ 2017_91 |                        |           |            |               |             |   |

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Slope stability with depression in crown due to vehicle traffic.

#### Photo 1 of 1 : FA\_2018\_RD0544\_108\_91\_20180906\_00065.jpg



Looking south at depression on levee crown and landward slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.53      | Rating **      | A/W                    | Issue No.  |    | 129          |
|----------|-----------|----------------|------------------------|------------|----|--------------|
| LM End   | 2.56      | Issue Type +   | Ма                     | Location * |    |              |
| Category |           |                | GPS Latitude/Longitude |            |    |              |
| Calegory | y         |                |                        | Start      |    | End          |
| Item     | 2017 Stor | m Damage       |                        | 37.84490   | 0° | 37.844500°   |
| пеш      |           |                |                        |            | 0° | -121.321900° |
| DWR ID   | DWR_RD0   | 544_01_f _ 201 | 7_129                  |            |    |              |

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:567

Site Designation:LMA-473 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: large rodent holes observed on landside slope.

| LM Start | 2.53 | Rating **    | A/W | Issue No.  | 129 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 2.56 | Issue Type + | Ma  | Location * |            |



Photo 2 of 3: LEVAL\_FA\_2018\_567\_4554.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.53      | Rating **                 | A/W       | Issue No.              |              | 129 (cont) |
|----------|-----------|---------------------------|-----------|------------------------|--------------|------------|
| LM End   | 2.56      | Issue Type +              | Ма        | Location *             |              |            |
| Category |           |                           |           | GPS Latitude/Longitude |              |            |
| Calegory |           |                           | Start     |                        | End          |            |
| Item     | 2017 Stor | m Damage                  |           | 37.8449                | 00°          | 37.844500° |
| item     |           |                           | -121.3223 | 00°                    | -121.321900° |            |
| DWR ID   | DWR_RD0   | VR_RD0544_01_f _ 2017_129 |           |                        |              |            |

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:567

Site Designation:LMA-473 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes: large rodent holes observed on landside slope.



| LM Start               | 2.53      | Rating **      | С        | Issue No.              |      | 15          |   |  |
|------------------------|-----------|----------------|----------|------------------------|------|-------------|---|--|
| LM End                 | 2.53      | Issue Type +   | Ma       | Location *             |      | LS          |   |  |
| Category Earthen Levee |           |                |          | GPS Latitude/Longitude |      |             |   |  |
| Calegory               |           |                | Start    |                        | End  |             |   |  |
| Item                   | Slope Sta | bility         |          | 37.8448                | 80°  | 37.844880   | 0 |  |
| item                   |           |                |          | -121.3222              | 12 ° | -121.322212 | 0 |  |
| DWR ID                 | DWR_RD0   | 544_01_s _ 201 | 8_15     |                        |      |             |   |  |
|                        |           | Comn           | nent Coc | łe                     |      |             |   |  |

Comr

S1 : Repair slope instability.

Inspector Comment

Large finger erosions on landward slope.

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 2.54                             | Rating **  | С                      | Issue No.   |     | 60            |  |  |
|------------------------|----------------------------------|--|------------------------|-------------|-----|---------------|--|--|
| LM End                 | 2.58                             | Issue Type +   | Ма                     | Location *  | LS  |               |  |  |
| Category Earthen Levee |                                  |  | GPS Latitude/Longitude |             |     |               |  |  |
| Calegory               | Category                         |  |                        | Start       |     | End           |  |  |
| Item                   | Slope Stability                  |  |                        | 37.844765 ° |     | 37.844253 °   |  |  |
| пеш                    |                                  |  |                        | -121.32214  | 13° | -121.321850 ° |  |  |
| DWR ID                 | DWR ID DWR_RD0544_01_s _ 2012_60 |  |                        |             |     |               |  |  |
| Comment Code           |                                  |  |                        |             |     |               |  |  |
| S2 : Repai             | r the levee                      | S2 : Repair the levee slope damaged by foot traffic and prevent access |                        |             |     |               |  |  |

where possible.

Inspector Comment

Finger erosion on landside slope.

No Photos

| LM Start               | 2.84       | Rating **      | N         | Issue No.              |              | 22         |
|------------------------|------------|----------------|-----------|------------------------|--------------|------------|
| LM End                 | 2.84       | Issue Type +   | Ma        | Location *             |              | LS         |
| Category Earthen Levee |            |                |           | GPS Latitude/Longitude |              |            |
| Calegory               | Zategory   |                |           | Start                  |              | End        |
| Item                   | Trim / Thi | n Trees        |           | 37.8410                | 75°          | 37.841075° |
| пеш                    |            |                | -121.3202 | 05 °                   | -121.320205° |            |
| DWR ID                 | DWR_RD0    | 544_01_s _ 201 | 2_22      |                        |              |            |

Comment Code

T5: Tree stumps.

Inspector Comment

No Photos

|     | LM Start               | 2.89      | Rating **    | U     | Issue No.              |     | 106         |   |  |
|-----|------------------------|-----------|--------------|-------|------------------------|-----|-------------|---|--|
|     | LM End                 | 3.16      | Issue Type + | Ma    | Location *             |     | WS          |   |  |
|     | Category Earthen Levee |           |              |       | GPS Latitude/Longitude |     |             |   |  |
|     | Calegory               |           |              |       | Start                  |     | End         |   |  |
|     | Item                   | Vegetatio | n            |       | 37.8409                | 52° | 37.837588   | 0 |  |
| пеш |                        |           |              |       | -121.3193              | 27° | -121.317540 | 0 |  |
|     | DWR ID                 | DWR RD0   | 544 01 s 201 | 5 106 |                        |     |             |   |  |

Comment Code

 $\ensuremath{\mathsf{V2}}$  : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense williows and vegetation on waterside slope.



Photo 1 of 1: FA\_2018\_RD0544\_108\_106\_20180906\_00073.jpg

Looking southeast at dense willows (veg) on waterward slope and toe fall 2015.

Location \*\* |
LS : Land Side N/A : Not Applicable

N/A: Not Applicable A

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Mainte

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

or & Maintain En : Enforcement

WS: Water Side

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| 1.04.04  | 2.05                              | Rating **    | М        | Issue No.  |        | 407          |  |  |  |
|--|-----------------------------------|--------------|----------|------------|--------|--------------|--|--|--|
| LM Start   | 2.95                              |              |          |            |        | 107          |  |  |  |
| LM End   | 2.96                              | Issue Type + | Ma       | Location * |        | LS           |  |  |  |
| Category   | Cotagon Earthen Levee             |              |          |            | atitud | le/Longitude |  |  |  |
| Category   |                                   |              |          | Start      |        | End          |  |  |  |
| Erosion / Bank Caving                                    |                                   |              |          | 37.8405    | 60°    | 37.840467°   |  |  |  |
| пеш  | Item                              |              |          |            | 63°    | -121.318367° |  |  |  |
| DWR ID   | DWR ID DWR_RD0544_01_s _ 2015_107 |              |          |            |        |              |  |  |  |
|  |                                   | Comn         | nent Cod | de         |        |              |  |  |  |
| E1 : Note and monitor erosion site.                      |                                   |              |          |            |        |              |  |  |  |
|  |                                   | Inspecto     | or Comm  | nent       |        |              |  |  |  |
| Several depressions on landside slope within this reach. |                                   |              |          |            |        |              |  |  |  |

| hoto 1 of 2 : | FA_2018     | _RD0544_  | _108_107_ | _20180906_ | _00074.jpg   |
|---------------|-------------|-----------|-----------|------------|--|
|               | 7           | 1         | 分         | -          | -  |
| 1             | Y ye        | 1         | +         |            | The state of the s |
|               |             |           | 13        | 14.        | No.  |
| f             | *           | MA        |           |            | 39.4   |
| 100           |             |           |           |            | 5  |
|               |             |           |           | tell celly | No.  |
|               |             |           |           |            |  |
|               | 14. × × × × |           |           | C. Jac.    |  |
|               | * / L       | 200       | 3         |            |  |
|               |             |           |           |            |  |
|               | 4 8 .       | STORES OF | 127       |            |  |

Looking south at depression on landward slope.

#### Photo 2 of 2: FA\_2018\_RD0544\_108\_107\_20180906\_00075.jpg



Looking west at depression on landward shoulder.

| LM End | 2.96 | Issue Type + | Ma | Location * | LS |
|--------|------|--------------|----|------------|----|
|        |      |              |    |            |    |

Issue No.

107 (cont)

Rating \*\*

LM Start

2.95

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 2.95        | Rating **     | М         | Issue No.  | 5            |             |  |  |  |
|--|-------------|---------------|-----------|------------|--------------|-------------|--|--|--|
| LM End   | 2.95        | Issue Type +  | Ma        | Location * |              | WS          |  |  |  |
| Category   | Suppleme    | ental         |           | GPS L      | atitud       | e/Longitude |  |  |  |
| Calegory   |             |               |           | Start      |              | End         |  |  |  |
| Item   | DWR Eros    | sion Survey   |           | 37.8406    | 97°          | 37.840697°  |  |  |  |
| пеш  |             |               | -121.3182 | 252°       | -121.318252° |             |  |  |  |
| DWR ID RD0544U01RM49.67  |             |               |           |            |              |             |  |  |  |
| Comment Code   |             |               |           |            |              |             |  |  |  |
|  |             |               |           |            |              |             |  |  |  |
|  |             |               |           |            |              |             |  |  |  |
|  |             | Inspecto      | or Comm   | nent       |              |             |  |  |  |
| 09/13/201  | 7: No signi | ficant change | observe   | d.         |              |             |  |  |  |
| 07/25/2010   | 6: No signi | ficant change | observe   | d.         |              |             |  |  |  |
| 06/24/201  | 5: No signi | ficant change | observe   | d.         |              |             |  |  |  |
| 06/19/2014: No significant change observed.                      |             |               |           |            |              |             |  |  |  |
| 08/13/2013: Pump has been removed. A larger pocket erosion has   |             |               |           |            |              |             |  |  |  |
| been found at the erosion site.                                  |             |               |           |            |              |             |  |  |  |
| 08/07/2012: The erosion is immediately upstream of a river bend. |             |               |           |            |              |             |  |  |  |

| Photo 1 of 3: FA_2018_RD0544_108_5_20180906_00010.jpg |
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| <b>《美国大学》</b>   |
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Front view of the erosion.

 LM Start
 2.95
 Rating \*\*
 M
 Issue No.
 5 (cont)

 LM End
 2.95
 Issue Type +
 Ma
 Location \*
 WS

Dense vegetation is visible at the erosion site. [2017 Site

ID:RD0544U01RM49.67]

Photo 2 of 3: FA\_2018\_RD0544\_108\_5\_20180906\_00011.jpg



Front view of the erosion.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.95               | Rating **    | M     | Issue No.              |     | 5 (cont)     |  |  |
|----------|--------------------|--------------|-------|------------------------|-----|--------------|--|--|
| LM End   | 2.95               | Issue Type + | Ma    | Location *             | WS  |              |  |  |
| Category |                    |              |       | GPS Latitude/Longitude |     |              |  |  |
| Calegory |                    |              | Start |                        | End |              |  |  |
| Item     | DWR Erosion Survey |              |       | 37.8406                | 97° | 37.840697°   |  |  |
| пеш      |                    |              |       | -121.3182              | 52° | -121.318252° |  |  |
| DWR ID   | RD0544U0           | 1RM49.67     |       |                        |     |              |  |  |

#### Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/24/2015: No significant change observed.

06/19/2014: No significant change observed.

08/13/2013: Pump has been removed. A larger pocket erosion has

been found at the erosion site.

08/07/2012: The erosion is immediately upstream of a river bend.

Dense vegetation is visible at the erosion site. [2017 Site

ID:RD0544U01RM49.67]



Downstream view of the site.

| LM Start               | 2.95                             | Rating **    | М                      | Issue No.  |              | 47         |  |  |  |  |
|------------------------|----------------------------------|--------------|------------------------|------------|--------------|------------|--|--|--|--|
| LM End                 | 3.19                             | Issue Type + | Ma                     | Location * | LS           |            |  |  |  |  |
| Category Earthen Levee |                                  |              | GPS Latitude/Longitude |            |              |            |  |  |  |  |
| Calegory               |                                  |              |                        | Start      |              | End        |  |  |  |  |
| Item                   | Vegetation                       |              |                        | 37.840485° |              | 37.837225° |  |  |  |  |
| пеш                    |                                  |              | -121.318390 °          |            | -121.317408° |            |  |  |  |  |
| DWR ID                 | DWR ID DWR_RD0544_01_s _ 2012_47 |              |                        |            |              |            |  |  |  |  |
| Comment Code           |                                  |              |                        |            |              |            |  |  |  |  |
| V6 D                   |                                  |              |                        |            |              |            |  |  |  |  |

V2: Remove the wild growth other than native grasses from the levee slopes.

#### Inspector Comment

#### Photo 1 of 1: FA\_2018\_RD0544\_108\_47\_20180906\_00036.jpg



Looking south at dense veg on landward slope fall 2015.

N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 2.98        | Rating **      | С          | Issue No.              |            | 151          |  |
|------------------------|-------------|----------------|------------|------------------------|------------|--------------|--|
| LM End                 | 3.18        | Issue Type +   | Ma         | Location *             |            | CR           |  |
| Category Earthen Levee |             |                |            | GPS Latitude/Longitude |            |              |  |
| Calegory               |             |                |            | Start                  |            | End          |  |
| Item                   | Vegetatio   | n              | 37.840184° |                        | 37.837294° |              |  |
| пеш                    |             |                |            | -121.3181              | 92°        | -121.317420° |  |
| DWR ID                 | DWR_RD0     | 544_01_f _ 201 | 7_151      |                        |            |              |  |
| Comment Code           |             |                |            |                        |            |              |  |
| V2 : Remo              | ve the wild | growth other   | than na    | tive grasse            | s fro      | m the levee  |  |

slopes.

Inspector Comment

No Photos

| LM Start               | 3.08       | Rating **      | M                      | Issue No.  |     | 108          |
|------------------------|------------|----------------|------------------------|------------|-----|--------------|
| LM End                 | 3.08       | Issue Type +   | Ma                     | Location * |     | LS           |
| Category Earthen Levee |            |                | GPS Latitude/Longitude |            |     |              |
|                        |            |                | Start                  |            | End |              |
| Item                   | Trim / Thi | n Trees        |                        | 37.8387    | 33° | 37.838733°   |
| пеш                    |            |                |                        | -121.3179  | 18° | -121.317918° |
| DWR ID                 | DWR_RD0    | 544_01_s _ 201 | 5_108                  |            |     |              |
|                        |            |                | . ^                    |            |     |              |

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

| LM Start | 3.14      | Rating **      | M    | Issue No.  |           | 76            |   |  |
|----------|-----------|----------------|------|------------|-----------|---------------|---|--|
| LM End   | 3.14      | Issue Type +   | Ма   | Location * | WS        |               |   |  |
| Category | Earthen L | evee           |      | GPS La     | ocation * | ide/Longitude |   |  |
| Calegory |           |                |      | Start      |           | End           |   |  |
| Item     | Erosion / | Bank Caving    |      | 37.8379    | 29°       | 37.837929     | 0 |  |
| Item     |           |                |      | -121.3176  | 63°       | -121.317663   | 0 |  |
| DWR ID   | DWR_RD0   | 544_01_f _ 201 | 3_76 |            |           |               |   |  |

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Slope damaged extends from levee slope to shoulder.

Photo 1 of 1: FA\_2018\_RD0544\_108\_76\_20180906\_00052.jpg



Looking east at slope damage on waterward slope.

\* Location

N/A: Not Applicable

LS: Land Side WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 3.17      | Rating **    | М                      | Issue No.  |     | 62           |
|----------------------------------|-----------|--------------|------------------------|------------|-----|--------------|
| LM End                           | 3.17      | Issue Type + | Ma                     | Location * | WS  |              |
| Category Earthen Levee           |           |              | GPS Latitude/Longitude |            |     |              |
| Calegory                         |           |              |                        | Start      | End |              |
| Item                             | Slope Sta | bility       |                        | 37.8375    | 30° | 37.837530°   |
| пеш                              |           |              |                        | -121.3175  | 10° | -121.317510° |
| DWR ID DWR_RD0544_01_s _ 2012_62 |           |              |                        |            | ·   |              |
|                                  |           | Comn         | nent Cod               | de         |     |              |

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

#### Inspector Comment

Slope damage due to foot traffic.



Looking east at slope damaged by foot traffic near pump house on waterside of levee.

| LM Start | 3.21         | Rating **      | A/W                    | Issue No.  |     | 131          |
|----------|--------------|----------------|------------------------|------------|-----|--------------|
| LM End   | 3.22         | Issue Type +   | Ма                     | Location * |     |              |
| Category |              |                | GPS Latitude/Longitude |            |     |              |
| Calegory |              |                |                        | Start      |     | End          |
| Item     | 2017 Stor    | m Damage       |                        | 37.8369    | 00° | 37.836700°   |
| item     |              |                |                        | -121.3173  | 00° | -121.317300° |
| DWR ID   | DWR_RD0      | 544_01_f _ 201 | 7_131                  |            |     |              |
|          | Comment Code |                |                        |            |     |              |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:566

Site Designation:LMA-472 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 3.21      | Rating **              | A/W                    | Issue No.  | 131 (cont) |              |
|----------|-----------|------------------------|------------------------|------------|------------|--------------|
| LM End   | 3.22      | Issue Type +           | Ma                     | Location * |            |              |
| Category |           |                        | GPS Latitude/Longitude |            |            |              |
| Calegory |           |                        |                        | Start      |            | End          |
| Item     | 2017 Stor | m Damage               |                        | 37.836900° |            | 37.836700°   |
| пеш      |           |                        |                        | -121.31730 | 00°        | -121.317300° |
| DWR ID   | DWR_RD0   | RD0544_01_f _ 2017_131 |                        |            |            |              |
|          |           | Comn                   | nent Cod               | de         |            |              |

#### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:566

Site Designation:LMA-472 Repair Type: Erosion Rating:Area of Concern Field Date:8/10/2017

Notes:

| LM Start | 3.21 | Rating **    | A/W | Issue No.  | 131 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 3.22 | Issue Type + | Ма  | Location * |            |



Photo 3 of 3: LEVAL\_FA\_2018\_566\_4722.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 3.22              | Rating **      | U                      | Issue No.    |       | 49           |
|--|-------------------|----------------|------------------------|--------------|-------|--------------|
| LM End   | 3.84              | Issue Type +   | Ma                     | Location *   | WS    |              |
| Earthen Levee  |                   |                | GPS Latitude/Longitude |              |       |              |
| Category   |                   |                |                        | Start        |       | End          |
| Item   | Vegetatio         | getation       |                        |              | '63 ° | 37.829195 °  |
| пеш  |                   |                |                        | -121.317307° |       | -121.311918° |
| DWR ID   | DWR_RD0           | 544_01_s _ 201 | 2_49                   |              |       |              |
|  |                   | Comn           | nent Coo               | de           |       |              |
| V2 : Remove the wild growth other than native grasses from the levee slopes. |                   |                |                        |              |       | m the levee  |
|  | Inspector Comment |                |                        |              |       |              |
| Dense veg  | etation on        | waterside slo  | pe.                    |              |       |              |

Photo 1 of 1: FA\_2018\_RD0544\_108\_49\_20180906\_00038.jpg

Looking northeast at dense veg on waterward slope.

| LM Start                         | 3.23      | Rating **    | U                      | Issue No.  |      | 48            |  |
|----------------------------------|-----------|--------------|------------------------|------------|------|---------------|--|
| LM End                           | 3.26      | Issue Type + | Ma                     | Location * |      | LS            |  |
| Earthen Levee                    |           |              | GPS Latitude/Longitude |            |      |               |  |
| Calegory                         | Category  |              |                        | Start      |      | End           |  |
| Item                             | Vegetatio | n            |                        | 37.8366    | 15°  | 37.836133 °   |  |
| item                             |           |              |                        | -121.3172  | 85 ° | -121.317153 ° |  |
| DWR ID DWR_RD0544_01_s _ 2012_48 |           |              |                        |            |      |               |  |
|                                  |           | 0            |                        | l_         |      |               |  |

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking south at typical view of dense veg on landward slope.

| LM Start  | 3.48      | Rating **      | M                      | Issue No.  | 56        |             |
|---|-----------|----------------|------------------------|------------|-----------|-------------|
| LM End  | 3.48      | Issue Type +   | Ma                     | Location * | LS        |             |
| Category Earthen Levee  |           |                | GPS Latitude/Longitude |            |           |             |
| Category  |           | Start          |                        | End        |           |             |
| Item  | Vegetatio | า              | 37.8335                | 83°        | 37.833583 |             |
| пеш   | item      |                |                        | -121.3149  | 68°       | -121.314968 |
| DWR ID  | DWR_RD0   | 544_01_s _ 201 | 2_56                   |            |           |             |
|   |           | Comn           | nent Coo               | le         |           |             |
| V4 : Elderberries are blocking visibility and flood fight capability. |           |                |                        |            |           |             |
| Inspector Comment   |           |                |                        |            |           |             |

No Photos

| * Location    |
|---------------|
| LS: Land Side |

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 3.49    | Rating **    | A/W       | Issue No.              |     | 162          |  |
|----------|---------|--------------|-----------|------------------------|-----|--------------|--|
| LM End   | 3.49    | Issue Type + | Ма        | Location *             |     |              |  |
| Category |         |              |           | GPS Latitude/Longitude |     |              |  |
| Calegory |         |              |           | Start                  |     | End          |  |
| Item     | DWR UCI | P LMA Respo  | nsibility | 37.83347               | 5 ° | 37.833475°   |  |
| пеш      |         |              |           | -121.31482             | 2°  | -121.314822° |  |
| DWR ID   | 22658   |              |           |                        |     |              |  |

#### Inspector Comment

Comment Code

FS\_ID:24892 DS\_ID:22658 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - pipe on channel bank looks comparatively new-pump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the

pump.

FIELD\_STRUCT\_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.53)].

FS Date: 10/29/2013

| LM Start | 3.49 | Rating **    | A/W | Issue No.  | 162 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 3.49 | Issue Type + | Ма  | Location * |            |

# Photo 1 of 3 : UCIP\_FA\_2018\_24892\_44853.jpg

WS view: exposed steel pipe on bank of the channel.

Photo 2 of 3: UCIP\_FA\_2018\_24892\_44852.jpg



WS view: exposed steel pipe and air vent on the pipe.

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 3.49         | Rating **    | A/W        | Issue No.  |                        | 162 (cont)  |   |  |
|----------|--------------|--------------|------------|------------|------------------------|-------------|---|--|
| LM End   | 3.49         | Issue Type + | Ma         | Location * |                        |             |   |  |
| Category | Supplemental |              |            |            | GPS Latitude/Longitude |             |   |  |
| Calegory |              |              |            | Start      |                        | End         |   |  |
| Item     | DWR UCI      | P LMA Respo  | onsibility | 37.83347   | 5 °                    | 37.833475   | 0 |  |
| пеш      |              |              |            | -121.31482 | 2°                     | -121.314822 | 0 |  |
| DWR ID   | 22658        |              |            |            |                        |             |   |  |

#### Inspector Comment

Comment Code

FS\_ID:24892 DS\_ID:22658 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: - pipe on channel bank looks comparatively newpump approximately 500 ft. from the levee center on landside in drainage ditch.- a tall concrete standpipe and service pole near the pump.

FIELD\_STRUCT\_DESC: 12-inch steel drainage discharge pipe through the levee, 3 feet below the crown. Pump and concrete standpipe in a drainage ditch on the landside (LS). Air vent on the waterside (WS). [Additional Reference(s): DWR Levee Log, 2005. USACE San Joaquin O&M Manual 7, April 1964, (HLM 3.53)].

FS Date: 10/29/2013



LS view: service pole, pump, and a concrete standpipe on bank of drainage ditch about 500 ft from the levee.

| LM Start                         | 3.49       | Rating **    | U         | Issue No.              |              | 51         |  |
|----------------------------------|------------|--------------|-----------|------------------------|--------------|------------|--|
| LM End                           | 4.67       | Issue Type + | Ма        | Location *             | LS           |            |  |
| Category Earthen Levee           |            |              |           | GPS Latitude/Longitude |              |            |  |
| Calegory                         |            |              |           | Start                  |              | End        |  |
| Item                             | Vegetation |              |           | 37.8334                | 32°          | 37.821853° |  |
| item                             |            |              | -121.3147 | 92 °                   | -121.319992° |            |  |
| DWR ID DWR_RD0544_01_s _ 2012_51 |            |              |           |                        |              |            |  |
| Comment Code                     |            |              |           |                        |              |            |  |

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

#### Photo 1 of 1: FA\_2018\_RD0544\_108\_51\_20180906\_00039.jpg



Looking southeast at the landside slope.

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 3.65                       | Rating **    | A/W | Issue No.  |                        | 132           |  |  |
|----------|----------------------------|--------------|-----|------------|------------------------|---------------|--|--|
| LM End   | 3.67                       | Issue Type + | Ma  | Location * |                        |               |  |  |
| Category | Supplemental               |              |     |            | GPS Latitude/Longitude |               |  |  |
| Calegory |                            |              |     | Start      |                        | End           |  |  |
| Item     | 2017 Storm Damage          |              |     | 37.8318    | 00°                    | 37.831600°    |  |  |
| пеш      |                            |              |     | -121.3127  | 00°                    | -121.312600 ° |  |  |
| DWR ID   | DWR_RD0544_01_f _ 2017_132 |              |     |            |                        |               |  |  |

#### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:565

Site Designation:LMA-471 Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: dense shrubs on levee slope

| LM Start | 3.65 | Rating **    | A/W | Issue No.  | 132 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 3.67 | Issue Type + | Ma  | Location * |            |



Photo 2 of 3: LEVAL\_FA\_2018\_565\_4741.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 3.65      | Rating **      | A/W                    | Issue No.  |     | 132 (cont)   |
|----------|-----------|----------------|------------------------|------------|-----|--------------|
| LM End   | 3.67      | Issue Type +   | Ма                     | Location * |     |              |
| Category |           |                | GPS Latitude/Longitude |            |     |              |
| Calegory |           |                |                        | Start      |     | End          |
| Item     | 2017 Stor | m Damage       |                        | 37.83180   | 00° | 37.831600°   |
| item     |           |                |                        |            | 00° | -121.312600° |
| DWR ID   | DWR_RD0   | 544_01_f _ 201 | 7_132                  |            |     | ·            |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:565

Site Designation:LMA-471 Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: dense shrubs on levee slope



| LM Start | 3.69      | Rating **      | A/W   | Issue No.  |        | 133           |
|----------|-----------|----------------|-------|------------|--------|---------------|
| LM End   | 3.73      | Issue Type +   | Ma    | Location * |        |               |
| Category | Suppleme  | ental          |       | GPS La     | atitud | e/Longitude   |
| Calegory |           |                |       | Start      |        | End           |
| Item     | 2017 Stor | m Damage       |       | 37.8313    | 00°    | 37.830700°    |
| item     |           |                |       | -121.3126  | 00°    | -121.312300 ° |
| DWR ID   | DWR_RD0   | 544_01_f _ 201 | 7_133 |            |        |               |
|          |           |                |       |            |        |               |

### Comment Code

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:564

Site Designation:LMA-470

Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: big rodent holes on levee slopes



Location

N/A: Not Applicable

LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 3.69      | Rating **    | A/W                    | Issue No.  |     | 133 (cont)   |  |
|-----------------------------------|-----------|--------------|------------------------|------------|-----|--------------|--|
| LM End                            | 3.73      | Issue Type + | Ma                     | Location * |     |              |  |
| Category                          |           |              | GPS Latitude/Longitude |            |     |              |  |
| Category                          |           |              | Start                  |            | End |              |  |
| Item                              | 2017 Stor | m Damage     |                        | 37.8313    | 00° | 37.830700°   |  |
| пеш                               |           |              |                        | -121.3126  | 00° | -121.312300° |  |
| DWR ID DWR_RD0544_01_f _ 2017_133 |           |              |                        |            |     |              |  |
| Comment Code                      |           |              |                        |            |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:564

Site Designation:LMA-470 Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: big rodent holes on levee slopes

| LM Start | 3.69 | Rating **    | A/W | Issue No.  | 133 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 3.73 | Issue Type + | Ma  | Location * |            |



Photo 3 of 3: LEVAL\_FA\_2018\_564\_4756.jpg



A: Acceptable

Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 3.76        | Rating **      | М         | Issue No.   |             | 109         |   |
|------------------------|-------------|----------------|-----------|-------------|-------------|-------------|---|
| LM End                 | 3.92        | Issue Type +   | Ma        | Location *  |             | LS          |   |
| Category Earthen Levee |             |                | GPS La    | atitud      | e/Longitude |             |   |
| Category               |             |                |           | Start       |             | End         |   |
| Item                   | Vegetatio   | n              |           | 37.8302     | 50°         | 37.828013   | 0 |
| пеш                    | item        |                |           |             | 23 °        | -121.311467 | 0 |
| DWR ID                 | DWR_RD0     | 544_01_s _ 201 | 5_109     |             |             |             |   |
|                        |             | Comn           | nent Cod  | de          |             |             |   |
| V4 : Elderl            | perries are | blocking visib | ility and | flood fight | capa        | ability.    |   |
| Inspector Comment      |             |                |           |             |             |             |   |
|                        |             |                |           |             |             |             |   |

No Photos

No Photos

Rating \*\* A/W Issue No. 3.79 LM Start 134 3.81 Issue Type + Location \* LM End Supplemental GPS Latitude/Longitude Category Start Fnd 2017 Storm Damage 37.829800° 37.829600° Item -121.312100° -121.312100° DWR\_RD0544\_01\_f \_ 2017\_134 DWR ID

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:563

Site Designation:LMA-469

Repair Type: Erosion Rating:Serious Field Date:8/11/2017

Notes: site combined with LMA-468; see LMA-468 for details.

LS: Land Side WS: Water Side

N/A: Not Applicable

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 3.81      | Rating **    | A/W          | Issue No.  |     | 135          |  |
|-----------------------------------|-----------|--------------|--------------|------------|-----|--------------|--|
| LM End                            | 3.82      | Issue Type + | Ma           | Location * |     |              |  |
| Category                          |           |              | Supplemental |            |     |              |  |
| Calegory                          |           |              |              | Start      |     | End          |  |
| Item                              | 2017 Stor | m Damage     |              | 37.8296    | 00° | 37.829400°   |  |
| item                              |           |              |              | -121.3120  | 00° | -121.312000° |  |
| DWR ID DWR_RD0544_01_f _ 2017_135 |           |              |              |            |     |              |  |
| Comment Code                      |           |              |              |            |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:562

Site Designation:LMA-468 Repair Type: Erosion

Rating:Serious Field Date:8/11/2017

Notes: Site combined with LMA-469;

| LM Start | 3.81 | Rating **    | A/W | Issue No.  | 135 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 3.82 | Issue Type + | Ма  | Location * | , ,        |



Photo 2 of 3: LEVAL\_FA\_2018\_562\_4835.jpg



U : Unacceptable

C : Corrected

N : Not Inspected/Rated A/W : Acceptable but Monitor & Maintain Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 3.81         | Rating **    | A/W                    | Issue No.  | 135 (cont) |               |  |
|-----------------------------------|--------------|--------------|------------------------|------------|------------|---------------|--|
| LM End                            | 3.82         | Issue Type + | Ма                     | Location * |            |               |  |
| Category                          | ental        |              | GPS Latitude/Longitude |            |            |               |  |
| Category                          |              |              |                        | Start      |            | End           |  |
| Item                              | 2017 Stor    | m Damage     |                        | 37.82960   | 00°        | 37.829400°    |  |
| пеш                               |              |              |                        | -121.3120  | 00°        | -121.312000 ° |  |
| DWR ID DWR_RD0544_01_f _ 2017_135 |              |              |                        |            |            |               |  |
|                                   | Comment Code |              |                        |            |            |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:562

Site Designation:LMA-468 Repair Type: Erosion Rating:Serious Field Date:8/11/2017

Notes: Site combined with LMA-469;



| LM Start | 3.92      | Rating **      | U                      | Issue No.  |           | 11          |   |
|----------|-----------|----------------|------------------------|------------|-----------|-------------|---|
| LM End   | 4.05      | Issue Type +   | Ma                     | Location * | WS        |             |   |
| Category | evee      |                | GPS Latitude/Longitude |            |           |             |   |
| Calegory |           |                |                        | Start      |           | End         |   |
| Item     | Animal Co |                | 37.8280                | 78°        | 37.826315 | 0           |   |
| пеш      |           |                |                        | -121.3114  | 83°       | -121.311024 | ٥ |
| DWR ID   | DWR_RD0   | 544_01_s _ 201 | 2_11                   |            |           |             |   |

#### Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

### Inspector Comment

Large rodent holes on waterside slope.

### Photo 1 of 1: FA\_2018\_RD0544\_108\_11\_20180906\_00017.jpg



Looking at large rodent holes on waterward slope.

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### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 3.97  | Rating **      | М     | Issue No.              |     | 24           |  |
|------------------------|---|----------------|-------|------------------------|-----|--------------|--|
| LM End                 | 3.97  | Issue Type +   | Ma    | Location *             |     | LS           |  |
| Category Earthen Levee |   |                |       | GPS Latitude/Longitude |     |              |  |
| Calegory               |   |                | Start |                        | End |              |  |
| Item                   | Vegetation  |                |       | 37.827360°             |     | 37.827360 °  |  |
| item                   |   |                |       | -121.311067 °          |     | -121.311067° |  |
| DWR ID                 | DWR_RD0   | 544_01_s _ 201 | 5_24  |                        |     |              |  |
| Comment Code           |   |                |       |                        |     |              |  |
| V4 : Elderk            | V4 : Elderberries are blocking visibility and flood fight capability. |                |       |                        |     |              |  |

Inspector Comment

No Photos

| LM Start                          | 4.25              | Rating **    | U  | Issue No.              |     | 120           |  |
|-----------------------------------|-------------------|--------------|----|------------------------|-----|---------------|--|
| LM End                            | 4.28              | Issue Type + | Ма | Location *             | LS  |               |  |
| Category Earthen Levee            |                   |              |    | GPS Latitude/Longitude |     |               |  |
| Calegory                          |                   |              |    | Start                  |     | End           |  |
| Item                              | Trim / Thin Trees |              |    | 37.8254                | 82° | 37.825229°    |  |
| item                              |                   |              |    | -121.3142              | 98° | -121.314771 ° |  |
| DWR ID DWR_RD0544_01_f _ 2015_120 |                   |              |    |                        |     |               |  |
|                                   |                   | _            |    |                        |     |               |  |

### Comment Code

T1: Trim trees to at least five feet above ground level.

### Inspector Comment

Several untrimmed trees on landside slope.

## Photo 1 of 1: FA\_2018\_RD0544\_108\_120\_20180906\_00088.jpg



Looking southwest at untrimmed trees on landward slope.

| LM Start | 4.30      | Rating **          | M        | Issue No.              |     | 59          |   |
|----------|-----------|--------------------|----------|------------------------|-----|-------------|---|
| LM End   | 4.30      | Issue Type +       | Ма       | Location *             |     | LS          |   |
| Category | Earthen L | evee               |          | GPS Latitude/Longitude |     |             |   |
| Calegory |           |                    |          | Start                  |     | End         |   |
| Item     | Vegetatio | n                  |          | 37.8249                | 43° | 37.824943   | 0 |
| item     |           |                    |          | -121.3150              | 08° | -121.315008 | 0 |
| DWR ID   | DWR_RD0   | Issue Type + Levee | 2_59     |                        |     |             |   |
|          |           | Comn               | nent Cod | le                     |     |             |   |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 4.34                   | Rating **    | С        | Issue No.    |        | 100           |  |
|--|------------------------|--------------|----------|--------------|--------|---------------|--|
| LM End   | 4.34                   | Issue Type + | Ma       | Location *   |        | WS            |  |
| Catagony   | Category Earthen Levee |              |          |              | atitud | e/Longitude   |  |
| Category   |                        |              |          | Start        |        | End           |  |
| Item   | Encroach               | ncroachments |          |              | 73 °   | 37.824373°    |  |
| item   |                        |              |          | -121.315207° |        | -121.315207 ° |  |
| DWR ID DWR_RD0544_01_s _ 2017_100                  |                        |              |          |              |        |               |  |
|  |                        | Comn         | nent Cod | de           |        |               |  |
| TR : Tree  | or limb                |              |          |              |        |               |  |
|  |                        |              |          |              |        |               |  |
|  |                        | Inspecto     | or Comm  | nent         |        |               |  |
| Broken tree limbs and branches on waterside slope. |                        |              |          |              |        |               |  |
|  |                        |              |          |              |        |               |  |
|  |                        |              |          |              |        |               |  |

No Photos

| LM Start                          | 4.36                          | Rating **    | М  | Issue No.  | 102                    |              |  |  |
|-----------------------------------|-------------------------------|--------------|----|------------|------------------------|--------------|--|--|
| LM End                            | 4.42                          | Issue Type + | Ma | Location * | CR                     |              |  |  |
| Category                          | Category Earthen Levee        |              |    |            | GPS Latitude/Longitude |              |  |  |
| Category                          |                               |              |    | Start      |                        | End          |  |  |
| Item                              | Crown Surface / Depressions / |              |    |            | 70°                    | 37.823494°   |  |  |
| пеш                               | Rutting                       |              |    | -121.3152  | 23 °                   | -121.315792° |  |  |
| DWR ID DWR_RD0544_01_f _ 2017_102 |                               |              |    |            |                        |              |  |  |
|                                   | Comment Code                  |              |    |            |                        |              |  |  |
|                                   |                               |              |    |            |                        |              |  |  |

C3: Add appropriate gravel or road base. Grade and compact.

Inspector Comment

No Photos

| LM Start                          | 4.41                   | Rating **    | U  | Issue No.    |                        | 117         |   |  |
|-----------------------------------|------------------------|--------------|----|--------------|------------------------|-------------|---|--|
| LM End                            | 4.79                   | Issue Type + | Ma | Location *   | WS                     |             |   |  |
| Catagory                          | Category Earthen Levee |              |    |              | GPS Latitude/Longitude |             |   |  |
| Calegory                          |                        |              |    | Start        |                        | End         |   |  |
| Item                              | Vegetatio              | n            |    | 37.8235      | 22°                    | 37.820557   | 0 |  |
| пеш                               |                        |              |    | -121.315735° |                        | -121.321217 | 0 |  |
| DWR ID DWR_RD0544_01_s _ 2017_117 |                        |              |    |              |                        |             |   |  |
|                                   | Comment Code           |              |    |              |                        |             |   |  |

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Looking southwest at the waterside slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

C: Corrected Ob: Design & System Obsolescence

C: Corrected C: Corrected

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 4.41        | Rating **      | U       | Issue No. 117 (cont    |       |              |  |
|-----------------------------------|-------------|----------------|---------|------------------------|-------|--------------|--|
| LM End                            | 4.79        | Issue Type +   | Ma      | Location *             | WS    |              |  |
| Category Earthen Levee            |             |                |         | GPS Latitude/Longitude |       |              |  |
| Calegory                          |             |                |         | Start                  |       | End          |  |
| Item                              | Vegetatio   | n              |         | 37.823522°             |       | 37.820557°   |  |
| item                              |             |                |         | -121.315735°           |       | -121.321217° |  |
| DWR ID DWR_RD0544_01_s _ 2017_117 |             |                |         |                        |       |              |  |
| Comment Code                      |             |                |         |                        |       |              |  |
| \/2 · Domo                        | wa tha wile | d arouth other | than no | tivo arosso            | o fro | m the levee  |  |

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment



Looking south at dense veg on waterward slope.

| LM Start | 4.46         | Rating **         | A/W   | Issue No.  |                        | 136           |  |
|----------|--------------|-------------------|-------|------------|------------------------|---------------|--|
| LM End   | 4.48         | Issue Type +      | Ма    | Location * |                        |               |  |
| Category | Supplemental |                   |       |            | GPS Latitude/Longitude |               |  |
| Calegory |              | Start             |       | End        |                        |               |  |
| Item     | 2017 Stor    | 2017 Storm Damage |       |            | 00°                    | 37.823000 °   |  |
| item     |              |                   |       | -121.31640 | 00°                    | -121.316800 ° |  |
| DWR ID   | DWR_RD0      | 544_01_f _ 201    | 7_136 |            |                        |               |  |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:561

Site Designation:LMA-467 Repair Type: Erosion Rating:Area of Concern

Field Date:8/11/2017

Notes: site combined with LMA-466 in field: length and coordinates

redefined in field.



LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | <b>4.46</b> Rating ** A/W |              |        | Issue No.    |     | 136 (cont)    |
|-----------------------------------|---------------------------|--------------|--------|--------------|-----|---------------|
| LM End                            | 4.48                      | Issue Type + | Ma     | Location *   |     |               |
| Category                          | ental                     | GPS La       | atitud | le/Longitude |     |               |
| Calegory                          | Category                  |              |        |              |     | End           |
| Item                              | 2017 Stor                 | m Damage     |        | 37.8232      | 00° | 37.823000°    |
| пеш                               |                           |              |        | -121.3164    | 00° | -121.316800 ° |
| DWR ID DWR_RD0544_01_f _ 2017_136 |                           |              |        |              |     |               |
| Comment Code                      |                           |              |        |              |     |               |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:561

Site Designation:LMA-467 Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: site combined with LMA-466 in field; length and coordinates

redefined in field.

| LM Start | 4.46 | 6 Rating **  |    | Issue No.  | 136 (cont) |
|----------|------|--------------|----|------------|------------|
| LM End   | 4.48 | Issue Type + | Ma | Location * |            |



Photo 3 of 3: LEVAL\_FA\_2018\_561\_4867.jpg



N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 4.48                       | Rating **         | Issue No. |            | 138                    |              |  |
|----------|----------------------------|-------------------|-----------|------------|------------------------|--------------|--|
| LM End   | 4.48                       | Issue Type +      | Ма        | Location * |                        |              |  |
| Category | Supplemental               |                   |           |            | GPS Latitude/Longitude |              |  |
| Calegory |                            | Start             |           | End        |                        |              |  |
| Item     | 2017 Stor                  | 2017 Storm Damage |           |            | 00°                    | 37.823000°   |  |
| пеш      |                            |                   |           | -121.31670 | 00°                    | -121.316800° |  |
| DWR ID   | DWR_RD0544_01_f _ 2017_138 |                   |           |            |                        |              |  |

No Photos

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:560

Site Designation:LMA-466 Repair Type: Erosion Rating:Area of Concern Field Date:8/11/2017

Notes: site combined with LMA-467 in field; see LMA-467 for details.

| LM Start                          | 4.48      | Rating **    | М                      | Issue No.  |     | 103          |
|-----------------------------------|-----------|--------------|------------------------|------------|-----|--------------|
| LM End                            | 4.48      | Issue Type + | Ma                     | Location * | LS  |              |
| Catagory Earthen Levee            |           |              | GPS Latitude/Longitude |            |     |              |
| Calegory                          | Category  |              |                        |            |     | End          |
| Item                              | Animal Co | ontrol       |                        | 37.8230    | 27° | 37.823027°   |
| пеш                               |           |              |                        | -121.3167  | 37° | -121.316737° |
| DWR ID DWR_RD0544_01_f _ 2014_103 |           |              |                        |            |     |              |
| Comment Code                      |           |              |                        |            |     |              |

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

No Photos

\* Location N/A: Not Applicable LS : Land Side

WS: Water Side

A: Acceptable

U : Unacceptable

Minimally Acceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start          | 4.49  | Rating **      | U        | Issue No.  | 41     |               |  |
|-------------------|---|----------------|----------|------------|--------|---------------|--|
| LM End            | 4.49  | Issue Type +   | Ma       | Location * | LS     |               |  |
| Category          | Earthen L   | evee           |          | GPS La     | atitud | e/Longitude   |  |
| Calegory          |   |                |          | Start      |        | End           |  |
| Item              | Vegetation  |                |          | 37.8229    | 34°    | 37.822934°    |  |
| пеш               |   |                |          | -121.3168  | 70°    | -121.316870 ° |  |
| DWR ID            | DWR_RD0   | 544_01_s _ 201 | 2_41     |            |        |               |  |
|                   |   | Comn           | nent Coo | de         |        |               |  |
| V4 : Elderb       | V4 : Elderberries are blocking visibility and flood fight capability. |                |          |            |        |               |  |
|                   |   |                |          |            |        |               |  |
| Inspector Comment |   |                |          |            |        |               |  |

No Photos

| LM Start                          | <b>4.64</b> Rating ** U |                        | Issue No. |            | 104           |            |
|-----------------------------------|-------------------------|------------------------|-----------|------------|---------------|------------|
| LM End                            | 4.68                    | Issue Type +           | Ma        | Location * | LS            |            |
| Catagory                          | evee                    | GPS Latitude/Longitude |           |            |               |            |
| Calegory                          | Category                |                        |           |            |               | End        |
| Item                              | Trim / Thi              | n Trees                |           | 37.8220    | 33 °          | 37.821826° |
| пеш                               |                         |                        | -121.3194 | 32 °       | -121.320071 ° |            |
| DWR ID DWR_RD0544_01_f _ 2014_104 |                         |                        |           |            |               |            |
| Comment Code                      |                         |                        |           |            |               |            |

T2 : Thin trees to allow visibility of the ground and room to flood fight.

2. This account violency of the ground and room to hood ngr

### Inspector Comment

Dense untrimmed trees on landside slope.

# Photo 1 of 1 : FA\_2018\_RD0544\_108\_104\_20180906\_00071.jpg



Looking southwest at dense untrimmed trees on landward slope fall 2015.

| LM Start   | 4.69              | Rating **      | U      | Issue No.  |             | 105           |
|--|-------------------|----------------|--------|------------|-------------|---------------|
| LM End   | 4.69              | Issue Type +   | Ма     | Location * |             | LS            |
| Category Earthen Levee   |                   |                | GPS La | atitud     | e/Longitude |               |
| Calegory   | egory             |                |        | Start      |             | End           |
| Item   | Trim / Thin Trees |                |        | 37.8217    | 75°         | 37.821775°    |
| item   |                   |                |        | -121.3202  | 03 °        | -121.320203 ° |
| DWR ID   | DWR_RD0           | 544_01_f _ 201 | 4_105  |            |             |               |
| Comment Code   |                   |                |        |            |             |               |
| T2 : Thin trees to allow visibility of the ground and room to flood fight. |                   |                |        |            |             |               |

### Inspector Comment

Tree has overgrown onto levee crown.

### Photo 1 of 1: FA\_2018\_RD0544\_108\_105\_20180906\_00072.jpg



Looking south at overgrown tree on landward shoulder.

| * Location                          | ** Rating                |   | + Issue Type                      |
|-------------------------------------|--------------------------|---|-----------------------------------|
| LS : Land Side N/A : Not Applicable | A : Acceptable           | N : Not Inspected/Rated                 | Ma : Maintenance Deficiancy       |
| WS: Water Side                      | M : Minimally Acceptable | C : Corrected                           | Ob : Design & System Obsolescence |
| CR : Crown                          | U : Unacceptable         | A/W : Acceptable but Monitor & Maintain | En: Enforcement                   |

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                       | 4.69      | Rating **      | M        | Issue No.  |        | 111          |  |
|--------------------------------|-----------|----------------|----------|------------|--------|--------------|--|
| LM End                         | 4.69      | Issue Type +   | Ma       | Location * |        | LS           |  |
| Category                       | Earthen L | evee           |          | GPS La     | atitud | e/Longitude  |  |
| Calegory                       |           |                |          | Start      |        | End          |  |
| Item                           | Encroachi | ments          |          | 37.8217    | '83    | 37.821783°   |  |
| пеш                            |           |                |          | -121.3202  | 37°    | -121.320237° |  |
| DWR ID                         | DWR_RD0   | 544_01_s _ 201 | 5_111    |            |        |              |  |
|                                |           | Comn           | nent Coc | le         |        |              |  |
| PR : Prunir                    | ngs       |                |          |            |        |              |  |
|                                |           |                |          |            |        |              |  |
| Inspector Comment              |           |                |          |            |        |              |  |
| Prunings on landside shoulder. |           |                |          |            |        |              |  |
|                                |           |                |          |            |        |              |  |

No Photos

Rating \*\* A/W Issue No. LM Start 4.71 29 Issue Type + Location \* CR LM End 4.71 Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 37.821626° 37.821626° -121.320471 -121.320471 DWR\_RD0544\_01\_s \_ 2012\_29 Comment Code

No Photos

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

District has employed a rodent control program and grouted holes.

Rating \*\* Issue No. LM Start 4.71 26 4.74 Issue Type + Ma Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 37.821592° 37.821253° Item -121.320617° -121.320927 ° DWR ID DWR\_RD0544\_01\_s \_ 2012\_26 Comment Code

No Photos

Inspector Comment

V4: Elderberries are blocking visibility and flood fight capability.

\* Location LS: Land Side N/A: No WS: Water Side

N/A: Not Applicable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 4.74      | Rating **    | U      | Issue No.  |             | 83           |
|----------------------------------|-----------|--------------|--------|------------|-------------|--------------|
| LM End                           | 4.74      | Issue Type + | Ма     | Location * |             | LS           |
| Catagony                         | Earthen L | evee         | GPS La | atitud     | e/Longitude |              |
| Calegory                         | Category  |              |        |            |             | End          |
| Item                             | Animal Co | ontrol       |        | 37.8212    | 87°         | 37.821287°   |
| item                             |           |              |        | -121.3208  | 97 °        | -121.320897° |
| DWR ID DWR_RD0544_01_f _ 2016_83 |           |              |        |            |             |              |

### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Large rodent hole on waterside shoulder.

### Photo 1 of 1: FA\_2018\_RD0544\_108\_83\_20180906\_00060.jpg



Looking at large rodent hole on landward slope.

| LM Start | 4.77       | Rating **      | М      | Issue No.  |             | 112           |
|----------|------------|----------------|--------|------------|-------------|---------------|
| LM End   | 4.77       | Issue Type +   | Ma     | Location * |             | LS            |
| Category | Earthen L  | evee           | GPS La | atitud     | e/Longitude |               |
| Calegory |            |                |        | Start      |             | End           |
| Item     | Trim / Thi | n Trees        |        | 37.8208    | 28°         | 37.820828 °   |
| пеш      |            |                |        | -121.3211  | 93 °        | -121.321193 ° |
| DWR ID   | DWR_RD0    | 544_01_s _ 201 | 5_112  |            |             |               |

#### Comment Code

T1: Trim trees to at least five feet above ground level.

### Inspector Comment

## Photo 1 of 1: FA\_2018\_RD0544\_108\_112\_20180906\_00077.jpg



Looking southwest at dense trees on landward slope and toe.

Photo 1 of 1: FA\_2018\_RD0544\_108\_113\_20180906\_00078.jpg

| LM Start | 4.77      | Rating **                  | U     | Issue No.                  |     | 113         |   |    |  |
|----------|-----------|----------------------------|-------|----------------------------|-----|-------------|---|----|--|
| LM End   | 4.77      | Issue Type + Ma Location * |       | Issue Type + Ma Location * |     | Location *  |   | WS |  |
| Category | Earthen L | evee                       |       | GPS Latitude/Longitude     |     |             |   |    |  |
| Calegory |           |                            |       | Start                      |     | End         |   |    |  |
| Item     | Animal Co | ontrol                     |       | 37.8208                    | 28° | 37.820828   | 0 |    |  |
| пеш      |           |                            |       | -121.3211                  | 93° | -121.321193 | ٥ |    |  |
| DWR ID   | DWR RD0   | 544 01 s 201               | 5 113 |                            |     |             |   |    |  |

### Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Large hole, possibly a rodent hole, on waterside slope.



Looking north at large hole on waterward slope.

Location

LS: Land Side N/A: Not Applicable

WS: Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| 4.80      | Rating **                     | U   | Issue No.   |   | 52   |
|-----------|-------------------------------|---|---|---|--|
| 4.80      | Issue Type +                  | Ma  | Location *  |   | LS   |
| Earthen L | evee                          |   | GPS La  | atitud  | e/Longitude                                    |
|           |                               |   | Start   |   | End  |
| Encroach  | ments                         |   | 37.8204   | 72°   | 37.820472°                                     |
|           |                               |   | -121.3211   | 90°   | -121.321190°                                   |
| DWR_RD0   | 544_01_f _ 201                | 8_52  |   |   |  |
|           | Comn                          | nent Cod  | de  |   |  |
| ngs       |                               |   |   |   |  |
|           |                               |   |   |   |  |
|           | Inspecto                      | or Comm   | nent  |   |  |
|           |                               |   |   |   |  |
|           |                               |   |   |   |  |
|           |                               |   |   |   |  |
|           | 4.80<br>Earthen L<br>Encroach | 4.80 Issue Type + Earthen Levee Encroachments  DWR_RD0544_01_f _ 201 Comn | 4.80 Issue Type + Ma Earthen Levee Encroachments  DWR_RD0544_01_f _ 2018_52  Comment Coonings | 4.80         Issue Type +         Ma         Location *           Earthen Levee         GPS List         Start           Encroachments         37.8204         -121.3211           DWR_RD0544_01_f _ 2018_52         Comment Code | 4.80 Issue Type + Ma Location *  Earthen Levee |



Looking west at large pruning pile at landward toe. (Fall 2018)

| LM Start | 4.97      | Rating **      | A/W   | Issue No.    |     | 139           |
|----------|-----------|----------------|-------|--------------|-----|---------------|
| LM End   | 4.99      | Issue Type +   | Ma    | Location *   |     |               |
| Category | ental     | GPS La         | tituc | le/Longitude |     |               |
| Calegory |           |                |       | Start        |     | End           |
| Item     | 2017 Stor | m Damage       |       | 37.8186      | 00° | 37.818400 °   |
| iteiii   |           |                |       | -121.3192    | 00° | -121.319000 ° |
| DWR ID   | DWR_RD0   | 544_01_f _ 201 | 7_139 |              |     |               |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:559

Site Designation:LMA-465

Repair Type: Erosion Rating:Serious

Field Date:8/11/2017

Notes:



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 4.97         | Rating **    | A/W   | Issue No.    | 139 (cont) |              |  |
|-----------------------------------|--------------|--------------|-------|--------------|------------|--------------|--|
| LM End                            | 4.99         | Issue Type + | Ma    | Location *   |            |              |  |
| Category                          | ental        | GPS La       | tituc | le/Longitude |            |              |  |
| Calegory                          | Category     |              |       |              |            | End          |  |
| Item                              | 2017 Stor    | m Damage     |       | 37.81860     | 00°        | 37.818400°   |  |
| пеш                               |              |              |       | -121.31920   | 00°        | -121.319000° |  |
| DWR ID DWR_RD0544_01_f _ 2017_139 |              |              |       |              |            |              |  |
|                                   | Comment Code |              |       |              |            |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:559

Site Designation:LMA-465

Repair Type: Erosion Rating:Serious Field Date:8/11/2017

Notes:

| LM Start | 4.97 | Rating **    | A/W | Issue No.  | 139 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 4.99 | Issue Type + | Ма  | Location * |            |



Photo 3 of 3: LEVAL\_FA\_2018\_559\_4894.jpg



N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 5.02              | Rating **     | M             | Issue No.  |              | 125         |  |  |
|-----------------------------------|-------------------|---------------|---------------|------------|--------------|-------------|--|--|
| LM End                            | 5.02              | Issue Type +  | Ma            | Location * |              | LS          |  |  |
| Category                          | Earthen L         | evee          |               | GPS La     | atitud       | e/Longitude |  |  |
| Calegory                          |                   |               |               | Start      |              | End         |  |  |
| Item                              | Animal Co         | ontrol        |               | 37.8179    | 42 °         | 37.817942°  |  |  |
| пеш                               |                   |               | -121.319118 ° |            | -121.319118° |             |  |  |
| DWR ID DWR_RD0544_01_s _ 2017_125 |                   |               |               |            |              |             |  |  |
|                                   |                   | Comn          | nent Coc      | le         |              |             |  |  |
| A1 : Exterr                       | ninate rod        | ents and back | fill and c    | compact or | grou         | t burrows.  |  |  |
|                                   |                   |               |               |            |              |             |  |  |
|                                   | Inspector Comment |               |               |            |              |             |  |  |
|                                   |                   |               |               |            |              |             |  |  |
|                                   |                   |               |               |            |              |             |  |  |
|                                   |                   |               |               |            |              |             |  |  |
|                                   |                   |               |               |            |              |             |  |  |

No Photos

Rating \*\* Issue No. 5.07 Μ LM Start 32 5.07 Issue Type + Ма Location \* WS LM End Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 37.817291° 37.817291 ° Item -121.319399 ° -121.319399° DWR\_RD0544\_01\_f \_ 2017\_32 DWR ID Comment Code

No Photos

Inspector Comment

A1: Exterminate rodents and backfill and compact or grout burrows.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 5.32                             | Rating **              | A/W   | Issue No.  |     | 140           |
|--------------|----------------------------------|------------------------|-------|------------|-----|---------------|
| LM End       | 5.36                             | Issue Type +           | Ма    | Location * |     |               |
| Category     | ental                            | GPS Latitude/Longitude |       |            |     |               |
| Category     |                                  |                        | Start |            | End |               |
| Item         | 2017 Storm Damage                |                        |       | 37.813900° |     | 37.813500°    |
| пеш          |                                  |                        |       | -121.31990 | 00° | -121.319400 ° |
| DWR ID       | VR ID DWR_RD0544_01_f _ 2017_140 |                        |       |            |     |               |
| Comment Code |                                  |                        |       |            |     |               |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:558

Site Designation:LMA-464 Repair Type: Erosion

Repair Type: Erosion Rating:Serious Field Date:8/16/2017

Notes:

| LM Start | 5.32 | Rating **    | A/W | Issue No.  | 140 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 5.36 | Issue Type + | Ma  | Location * |            |



Photo 2 of 3: LEVAL\_FA\_2018\_558\_4904.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                          | 5.32              | Rating **    | A/W | Issue No.              |     | 140 (cont)    |
|-----------------------------------|-------------------|--------------|-----|------------------------|-----|---------------|
| LM End                            | 5.36              | Issue Type + | Ма  | Location *             |     |               |
| Category                          |                   |              |     | GPS Latitude/Longitude |     |               |
| Calegory                          | Category          |              |     | Start                  |     | End           |
| Item                              | 2017 Storm Damage |              |     | 37.81390               | 00° | 37.813500°    |
| пеш                               |                   |              |     | -121.31990             | 00° | -121.319400 ° |
| DWR ID DWR_RD0544_01_f _ 2017_140 |                   |              |     |                        |     |               |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:558

Site Designation:LMA-464 Repair Type: Erosion Rating:Serious

Field Date:8/16/2017

Notes:



| LM Start                          | 5.36              | Rating **    | A/W   | Issue No.    |     | 141          |  |
|-----------------------------------|-------------------|--------------|-------|--------------|-----|--------------|--|
| LM End                            | 5.37              | Issue Type + | Ма    | Location *   |     |              |  |
| Category                          | ental             | GPS La       | tituc | le/Longitude |     |              |  |
| Category                          |                   |              |       | Start        |     | End          |  |
| Item                              | 2017 Storm Damage |              |       |              | 00° | 37.813300°   |  |
| item                              |                   |              |       | -121.3193    | 00° | -121.319200° |  |
| DWR ID DWR_RD0544_01_f _ 2017_141 |                   |              |       |              |     |              |  |
| Comment Code                      |                   |              |       |              |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:557

Site Designation:LMA-463

Repair Type: Erosion

Rating: Area of Concern

Field Date:8/16/2017

Notes:



| * Location    |                     |
|---------------|---------------------|
| LS: Land Side | N/A: Not Applicable |

WS: Water Side

Acceptable

U : Unacceptable

Minimally Acceptable

N : Not Inspected/Rated C : Corrected

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 5.36                              | Rating **    | A/W | Issue No.              |     | 141 (cont)   |  |
|--------------|-----------------------------------|--------------|-----|------------------------|-----|--------------|--|
| LM End       | 5.37                              | Issue Type + | Ма  | Location *             |     |              |  |
| Supplemental |                                   |              |     | GPS Latitude/Longitude |     |              |  |
| Category     | Category                          |              |     | Start                  |     | End          |  |
| Item         | 2017 Storm Damage                 |              |     | 37.813400°             |     | 37.813300°   |  |
| пеш          |                                   |              |     | -121.31930             | 00° | -121.319200° |  |
| DWR ID       | DWR ID DWR_RD0544_01_f _ 2017_141 |              |     |                        |     |              |  |
| Comment Code |                                   |              |     |                        |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

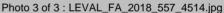
Site ID No:557

Site Designation:LMA-463 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:

| LM Start | 5.36 | Rating **    | A/W | Issue No.  | 141 (cont) |
|----------|------|--------------|-----|------------|------------|
| LM End   | 5.37 | Issue Type + | Ma  | Location * |            |







N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 5.49         | Rating **    | U  | Issue No.              | 18  |             |   |
|----------------------------------|--------------|--------------|----|------------------------|-----|-------------|---|
| LM End                           | 5.55         | Issue Type + | Ma | Location *             | LS  |             |   |
| Category Earthen Levee           |              |              |    | GPS Latitude/Longitude |     |             |   |
| Calegory                         | Category     |              |    |                        |     | End         |   |
| Item                             | Vegetation   |              |    | 37.8120                | 33° | 37.811687   | 0 |
| пеш                              |              |              |    | -121.3197              | 37° | -121.320677 | 0 |
| DWR ID DWR_RD0544_01_s _ 2012_18 |              |              |    |                        |     |             |   |
|                                  | Comment Code |              |    |                        |     |             |   |
|                                  |              |              |    |                        |     |             |   |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Elderberry exists on the slope of the levee.

| LM Start                         | 5.64              | Rating **              | N     | Issue No.  |     | 40           |
|----------------------------------|-------------------|------------------------|-------|------------|-----|--------------|
| LM End                           | 5.64              | Issue Type +           | Ma    | Location * | LS  |              |
| Category                         | evee              | GPS Latitude/Longitude |       |            |     |              |
| Category                         |                   |                        | Start |            | End |              |
| Item                             | Trim / Thin Trees |                        |       | 37.8111    | 99° | 37.811199°   |
| пеш                              |                   |                        |       | -121.3221  | 76° | -121.322176° |
| DWR ID DWR_RD0544_01_s _ 2012_40 |                   |                        |       |            |     |              |
| Comment Code                     |                   |                        |       |            |     |              |

T5: Tree stumps.

Inspector Comment

No Photos

No Photos

| LM Start        | 5.72      | Rating **      | С        | Issue No.  |                        | 115         |   |
|-----------------|-----------|----------------|----------|------------|------------------------|-------------|---|
| LM End          | 5.72      | Issue Type +   | Ma       | Location * |                        | LS          |   |
| Category        | Earthen L | evee           | Э        |            | GPS Latitude/Longitude |             |   |
| Calegory        |           |                |          | Start      |                        | End         |   |
| Slope Stability |           |                | 37.81122 | 25°        | 37.811225              | ٥           |   |
| item            |           |                |          | -121.32357 | 75 °                   | -121.323575 | ٥ |
| DWR ID          | DWR_RD0   | 544_01_s _ 201 | 5_115    |            |                        |             |   |
|                 |           | Comp           | oont Coo | اما        |                        |             |   |

S2: Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Landowner excavated hole above pipe. Large hole left on landward shoulder and slope. Call LMA about repair.

No Photos

\* Location

LS : Land Side N/A : Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway                      | Bank | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-------------------------------|------|------------|--------------------------|-----------------------|
| Unit No. 01 San Joaquin River | Left | 6.05       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start  | 5.82                              | Rating **    | С        | Issue No.  |        | 124           |
|-----------|-----------------------------------|--------------|----------|------------|--------|---------------|
| LM End    | 5.82                              | Issue Type + | Ma       | Location * |        | LS            |
| Category  | Earthen L                         | evee         |          | GPS La     | atitud | e/Longitude   |
| Calegory  |                                   |              |          | Start      |        | End           |
| Item      | Encroachi                         | ments        |          | 37.8110    | 49°    | 37.811049°    |
| пеш       |                                   |              |          | -121.3254  | 51°    | -121.325451 ° |
| DWR ID    | DWR ID DWR_RD0544_01_s _ 2016_124 |              |          |            |        |               |
|           |                                   | Comn         | nent Cod | de         |        |               |
| TR : Tree | or limb                           |              |          |            |        |               |
|           |                                   |              |          |            |        |               |
|           |                                   | Inspecto     | or Comm  | nent       |        |               |
|           |                                   |              |          |            |        |               |
|           |                                   |              |          |            |        |               |
|           |                                   |              |          |            |        |               |
|           |                                   |              |          |            |        |               |

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.21                            | Rating **    | A/W | Issue No.  | 37                     |               |  |  |
|----------|---------------------------------|--------------|-----|------------|------------------------|---------------|--|--|
| LM End   | 0.23                            | Issue Type + | Ма  | Location * |                        |               |  |  |
| Category | Category Supplemental           |              |     |            | GPS Latitude/Longitude |               |  |  |
| Calegory |                                 |              |     | Start End  |                        |               |  |  |
| Item     | 2017 Stor                       | m Damage     |     | 37.8083    | 00°                    | 37.808400°    |  |  |
| пеш      |                                 |              |     | -121.3320  | 00°                    | -121.332200 ° |  |  |
| DWR ID   | WR ID DWR_RD0544_02_f _ 2017_37 |              |     |            |                        |               |  |  |
|          | Comment Code                    |              |     |            |                        |               |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:556

Site Designation:LMA-462 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:

| LM Start | 0.21 | Rating **    | A/W | Issue No.  | 37 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 0.23 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_556\_4521.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.21                           | Rating **    | A/W | Issue No.  | No. 37 (cont) |                        |  |  |  |
|----------|--------------------------------|--------------|-----|------------|---------------|------------------------|--|--|--|
| LM End   | 0.23                           | Issue Type + | Ма  | Location * |               |                        |  |  |  |
| Category | Supplemental                   |              |     |            |               | GPS Latitude/Longitude |  |  |  |
| Calegory |                                |              |     | Start End  |               |                        |  |  |  |
| Item     | 2017 Stor                      | m Damage     |     | 37.8083    | ° 00          | 37.808400°             |  |  |  |
| пеш      |                                |              |     | -121.3320  | 00°           | -121.332200°           |  |  |  |
| DWR ID   | R ID DWR_RD0544_02_f _ 2017_37 |              |     |            |               |                        |  |  |  |
|          | Comment Code                   |              |     |            |               |                        |  |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:556

Site Designation:LMA-462 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:



| LM Start                        | 0.21      | Rating **    | U      | Issue No.  | 2            |               |  |
|---------------------------------|-----------|--------------|--------|------------|--------------|---------------|--|
| LM End                          | 0.26      | Issue Type + | Ma     | Location * | WS           |               |  |
| Category Earthen Levee          |           |              | GPS La | tituc      | le/Longitude |               |  |
| Category                        |           |              |        | Start      |              | End           |  |
| Item                            | Vegetatio | n            |        | 37.80833   | 31 °         | 37.808576°    |  |
| itein                           | em        |              |        |            | 97°          | -121.332672 ° |  |
| DWR ID DWR_RD0544_02_s _ 2018_2 |           |              |        |            |              |               |  |
| Comment Code                    |           |              |        |            |              |               |  |

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

### Photo 1 of 1: FA\_2018\_RD0544\_109\_2\_20180906\_00002.jpg



Looking southeast at dense veg on waterward slope. (Spring 2018)

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start    | 0.40        | Rating **      | М         | Issue No.   |        | 4            |  |
|-------------|-------------|----------------|-----------|-------------|--------|--------------|--|
| LM End      | 0.40        | Issue Type +   | Ma        | Location *  | LS     |              |  |
| Category    | Earthen L   | evee           |           | GPS La      | atitud | le/Longitude |  |
| Category    |             |                |           | Start       |        | End          |  |
| Item        | Vegetatio   | 37.8097        | 88°       | 37.809788°  |        |              |  |
| пеш         |             |                |           | -121.3347   | 27°    | -121.334727° |  |
| DWR ID      | DWR_RD0     | 544_02_s _ 201 | 2_4       |             |        |              |  |
|             |             | Comn           | nent Cod  | de          |        |              |  |
| V4 : Elderb | perries are | blocking visib | ility and | flood fight | сара   | ability.     |  |
|             |             |                |           |             |        |              |  |
|             |             | Inspecto       | or Comm   | nent        |        |              |  |
|             |             |                |           |             |        |              |  |

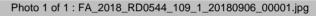
No Photos

| LM Start | 0.43          | Rating **      | М     | Issue No.  |      | 1            |
|----------|---------------|----------------|-------|------------|------|--------------|
| LM End   | 1.12          | Issue Type +   | Ma    | Location * | LS   |              |
| Category | Earthen Levee |                | Levee |            |      | e/Longitude  |
| Calegory |               |                | Start |            | End  |              |
| Item     | Vegetatio     | n              |       | 37.8102    | 50°  | 37.819452°   |
| пеш      |               |                |       | -121.3349  | 33 ° | -121.333755° |
| DWR ID   | DWR_RD0       | 544_02_s _ 201 | 2_1   |            |      | ·            |

### Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment





Looking southwest at dense vegetation at landward toe.

| LM Start                         | 0.44         | Rating **                | U  | Issue No.  | D. 71 |            |  |  |
|----------------------------------|--------------|--------------------------|----|------------|-------|------------|--|--|
| LM End                           | 0.44         | Issue Type +             | Ма | Location * | LS    |            |  |  |
| Category                         | evee         | GPS Latitude/Longitude   |    |            |       |            |  |  |
| Calegory                         |              |                          |    | Start      |       | End        |  |  |
| Item                             | Erosion /    | Bank Caving              |    | 37.8103    | 88°   | 37.810388° |  |  |
| item                             |              | -121.334977 ° -121.33497 |    |            |       |            |  |  |
| DWR ID DWR_RD0544_02_s _ 2017_71 |              |                          |    |            |       |            |  |  |
|                                  | Comment Code |                          |    |            |       |            |  |  |

### Inspector Comment

Landside erosion due to runoff.



Looking northwest at runoff erosion on landward shoulder and slope.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 0.44         | Rating **    | A/W    | Issue No.  | 70           |              |  |
|----------------------------------|--------------|--------------|--------|------------|--------------|--------------|--|
| LM End                           | 0.46         | Issue Type + | Ma     | Location * |              |              |  |
| Category                         | Suppleme     | ental        | GPS La | atitud     | le/Longitude |              |  |
| Calegory                         |              |              |        | Start      |              | End          |  |
| Item                             | 2017 Stor    | m Damage     |        | 37.8104    | 00°          | 37.810700°   |  |
| пеш                              |              |              |        | -121.3350  | 00°          | -121.335000° |  |
| DWR ID DWR_RD0544_02_f _ 2017_70 |              |              |        |            |              |              |  |
|                                  | Comment Code |              |        |            |              |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:555

Site Designation:LMA-461 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:

| LM Start | 0.44 | Rating **    | A/W | Issue No.  | 70 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 0.46 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_555\_4624.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 0.44      | Rating **    | A/W | Issue No.              |     | 70 (cont)     |
|----------------------------------|-----------|--------------|-----|------------------------|-----|---------------|
| LM End                           | 0.46      | Issue Type + | Ма  | Location *             |     |               |
| Category                         | Suppleme  | ental        |     | GPS Latitude/Longitude |     |               |
| Calegory                         |           |              |     | Start                  |     | End           |
| Item                             | 2017 Stor | m Damage     |     | 37.81040               | 00° | 37.810700°    |
| пеш                              |           |              |     | -121.33500             | 00° | -121.335000 ° |
| DWR ID DWR_RD0544_02_f _ 2017_70 |           |              |     |                        |     |               |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:555

Site Designation:LMA-461 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:



| LM Start                         | 0.57         | Rating **    | A/W   | Issue No.    | 80  |              |  |
|----------------------------------|--------------|--------------|-------|--------------|-----|--------------|--|
| LM End                           | 0.58         | Issue Type + | Ma    | Location *   |     |              |  |
| Category                         | ental        | GPS La       | tituc | le/Longitude |     |              |  |
| Calegory                         |              |              | Start |              | End |              |  |
| Item                             | 2017 Stor    | m Damage     |       | 37.81230     | 00° | 37.812400°   |  |
| item                             |              |              |       | -121.33510   | 00° | -121.335100° |  |
| DWR ID DWR_RD0544_02_f _ 2017_80 |              |              |       |              |     |              |  |
|                                  | Comment Code |              |       |              |     |              |  |

# Inspector Comment

Levee Evaluation Comments

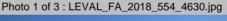
Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:554

Site Designation:LMA-460

Repair Type: Erosion Rating:Area of Concern

Field Date:8/16/2017 Notes:





LS: Land Side N/A: Not Applicable

WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.57                            | Rating **              | A/W | Issue No.  |     | 80 (cont)     |
|----------|---------------------------------|------------------------|-----|------------|-----|---------------|
| LM End   | 0.58                            | Issue Type +           | Ма  | Location * |     |               |
| Category | Suppleme                        | GPS Latitude/Longitude |     |            |     |               |
| Calegory |                                 |                        |     | Start      |     | End           |
| Item     | 2017 Stor                       | m Damage               |     | 37.8123    | 00° | 37.812400 °   |
| пеш      |                                 |                        |     | -121.3351  | 00° | -121.335100 ° |
| DWR ID   | WR ID DWR_RD0544_02_f _ 2017_80 |                        |     |            |     |               |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:554

Site Designation:LMA-460 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:

| LM Start | 0.57 | Rating **    | A/W | Issue No.  | 80 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 0.58 | Issue Type + | Ma  | Location * |           |





### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 0.64      | Rating **    | U        | Issue No.              |      | 27           |  |  |
|----------------------------------|-----------|--------------|----------|------------------------|------|--------------|--|--|
| LM End                           | 0.64      | Issue Type + | Ma       | Location *             |      | WS           |  |  |
| Category                         | Earthen L | evee         |          | GPS Latitude/Longitude |      |              |  |  |
| Calegory                         |           |              |          | Start                  |      | End          |  |  |
| Item                             | Encroachi | ments        |          | 37.8133                | 07°  | 37.813307°   |  |  |
| item                             |           |              |          | -121.3351              | 35 ° | -121.335135° |  |  |
| DWR ID DWR_RD0544_02_f _ 2018_27 |           |              |          |                        |      |              |  |  |
|                                  |           | Comn         | nent Cod | de                     |      |              |  |  |
| TR : Tree                        | or limb   |              |          |                        |      |              |  |  |
|                                  |           |              | _        |                        |      |              |  |  |
|                                  |           | Inspecto     | or Comm  | nent                   |      |              |  |  |
|                                  |           |              |          |                        |      |              |  |  |
|                                  |           |              |          |                        |      |              |  |  |
|                                  |           |              |          |                        |      |              |  |  |
|                                  |           |              |          |                        |      |              |  |  |

| Photo 1 of 2 | : FA_2018_ | _RD0544_ | _109_27_ | _20180919_ | _00125. | jpg |
|--------------|------------|----------|----------|------------|---------|-----|
|              |            | 子许是      |          |            |         |     |
|              |            |          |          |            |         |     |
|              |            | A SHARE  |          | Corner la  | 4       |     |
|              |            |          |          |            |         |     |
|              |            |          |          | 1          |         |     |
|              | NA J       | 1/0      |          | THE PARTY  |         |     |
|              |            | 16.0     |          | 1          |         |     |
|              |            |          |          | 10 May 1   |         |     |
|              |            |          | 75 14    |            |         |     |
|              |            | 1        |          |            | 10      |     |
| TO MAN       | 11         |          | A/       | 09 13      | 2010    |     |

Looking southeastt at tree limbs on waterward shoulder. (Fall 2018)

 LM Start
 0.64
 Rating \*\*
 U
 Issue No.
 27 (cont)

 LM End
 0.64
 Issue Type +
 Ma
 Location \*
 WS

Photo 2 of 2 : FA\_2018\_RD0544\_109\_27\_20180919\_00126.jpg



Looking east at tree brank on waterslope slope. (Fall 2018)

| LM Start                         | 0.71      | Rating **            | М        | Issue No.   |        | 98           |  |  |
|----------------------------------|-----------|----------------------|----------|-------------|--------|--------------|--|--|
| LM End                           | 0.71      | Issue Type +         | Ma       | Location *  |        | LS           |  |  |
| 0-4                              | Earthen L | evee                 |          | GPS La      | atitud | e/Longitude  |  |  |
| Category                         |           |                      |          | Start       |        | End          |  |  |
| Item                             | Animal Co | ontrol               |          | 37.8142     | 67°    | 37.814267°   |  |  |
| item                             | item      |                      |          |             |        | -121.334627° |  |  |
| DWR ID DWR_RD0544_02_f _ 2017_98 |           |                      |          |             |        |              |  |  |
|                                  |           | Comn                 | nent Cod | de          |        |              |  |  |
| A3 : No roccompact o             |           | le, but rodent rows. | burrows  | visible; ne | ed to  | backfill and |  |  |
|                                  |           | Inspecto             | or Comm  | nent        |        |              |  |  |
|                                  |           |                      |          |             |        |              |  |  |
|                                  |           |                      |          |             |        |              |  |  |
|                                  |           |                      |          |             |        |              |  |  |
|                                  |           |                      |          |             |        |              |  |  |

No Photos

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start          | 0.72        | Rating **      | A/W       | Issue No.    |        | 5             |   |
|-------------------|-------------|----------------|-----------|--------------|--------|---------------|---|
| LM End            | 0.72        | Issue Type +   | Ma        | Location *   |        | LS            |   |
| Category          | Earthen L   | evee           |           | GPS La       | atitud | e/Longitude   |   |
| Category          | Category    |                |           | Start        |        | End           |   |
| Itom              | Vegetation  |                |           | 37.8143      | 33°    | 37.814333     | 0 |
| пеш               |             |                |           | -121.334592° |        | -121.334592 ° |   |
| DWR ID            | DWR_RD0     | 544_02_s _ 201 | 2_5       |              |        |               |   |
|                   |             | Comn           | nent Coc  | le           |        |               |   |
| V4 : Elderl       | perries are | blocking visit | ility and | flood fight  | сара   | ability.      |   |
|                   |             |                |           |              |        |               |   |
| Inspector Comment |             |                |           |              |        |               |   |
|                   |             |                |           |              |        |               |   |

No Photos

| LM Start                        | 0.78          | Rating **    | U         | Issue No.  |              | 8            |  |
|---------------------------------|---------------|--------------|-----------|------------|--------------|--------------|--|
| LM End                          | 0.78          | Issue Type + | Ma        | Location * |              | WS           |  |
| Category Systems                |               |              |           | GPS La     | titud        | le/Longitude |  |
| Calegory                        | Systems       | Start        |           | End        |              |              |  |
| Item                            | Erosion Areas |              |           | 37.8150    | 94°          | 37.815094°   |  |
| item                            |               |              | -121.3339 | 27°        | -121.333927° |              |  |
| DWR ID DWR_RD0544_02_s _ 2012_8 |               |              |           |            |              |              |  |
|                                 | Comment Code  |              |           |            |              |              |  |

### Inspector Comment

Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.

| LM Start | 0.78 | Rating **    | U  | Issue No.  | 8 (cont) |
|----------|------|--------------|----|------------|----------|
| LM End   | 0.78 | Issue Type + | Ma | Location * | WS       |

### Photo 1 of 4: FA\_2018\_RD0544\_109\_8\_20180906\_00006.jpg



Looking south at depression greater than 6" on waterside shoulder.

### Photo 2 of 4: FA\_2018\_RD0544\_109\_8\_20180906\_00007.jpg



Looking east at caving around siphon on waterside shoulder. (Spring 2012)

\*Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiancy

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 0.78                                  | Rating **    | U  | Issue No.                                      |     | 8 (cont)     |              |
|----------|---------------------------------------|--------------|----|--|-----|--------------|--------------|
| LM End   | 0.78                                  | Issue Type + | Ma | Location *                                     |     | WS           |              |
| Category | Interior Drainage & Piping<br>Systems |              |    | Interior Drainage & Piping GPS Latitude/Longit |     |              | le/Longitude |
| Calegory |                                       |              |    | Start  |     | End          |              |
| Item     | Erosion A                             | reas         |    | 37.8150  | 94° | 37.815094°   |              |
| item     |                                       |              |    |  | 27° | -121.333927° |              |
| DWR ID   | ID DWR_RD0544_02_s _ 2012_8           |              |    |  |     |              |              |
|          | Comment Code                          |              |    |  |     |              |              |

### Inspector Comment

Caving under and around siphon on waterside shoulder. No material 3' below pipe. Caving around siphon is 20" to 24" deep approximately 72" in diameter. During 2012 spring inspection hole appears to be enlarging.

| LM Start | 0.78 | Rating **    | U  | Issue No.  | 8 (cont) |
|----------|------|--------------|----|------------|----------|
| LM End   | 0.78 | Issue Type + | Ma | Location * | WS       |



Looking west at caving around siphon on waterside shoulder. (Spring 2012)

Photo 4 of 4: FA\_2018\_RD0544\_109\_8\_20180906\_00009.jpg



Looking south at caving around siphon on waterside shoulder.(Spring 2012)

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 1.01                            | Rating **    | A/W                    | Issue No.  |     | 82            |  |
|--------------|---------------------------------|--------------|------------------------|------------|-----|---------------|--|
| LM End       | 1.02                            | Issue Type + | Ма                     | Location * |     |               |  |
| Supplemental |                                 |              | GPS Latitude/Longitude |            |     |               |  |
| Calegory     | Salegory                        |              |                        | Start      |     | End           |  |
| Item         | 2017 Stor                       | m Damage     |                        | 37.81810   | 00° | 37.818200°    |  |
| пеш          |                                 |              |                        | -121.33280 | 00° | -121.332800 ° |  |
| DWR ID       | NR ID DWR_RD0544_02_f _ 2017_82 |              |                        |            |     |               |  |
|              | Comment Code                    |              |                        |            |     |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:552

Site Designation:LMA-458 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:

| LM Start | 1.01 | Rating **    | A/W | Issue No.  | 82 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 1.02 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_552\_4811.jpg



### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 1.01         | Rating **    | A/W                    | Issue No.  | 82 (cont) |              |  |
|----------------------------------|--------------|--------------|------------------------|------------|-----------|--------------|--|
| LM End                           | 1.02         | Issue Type + | Ma                     | Location * |           |              |  |
| Supplemental                     |              |              | GPS Latitude/Longitude |            |           |              |  |
| Calegory                         | Category     |              |                        | Start      |           | End          |  |
| Item                             | 2017 Stor    | m Damage     |                        | 37.8181    | 00°       | 37.818200°   |  |
| пеш                              |              |              |                        | -121.3328  | 00°       | -121.332800° |  |
| DWR ID DWR_RD0544_02_f _ 2017_82 |              |              |                        |            |           |              |  |
|                                  | Comment Code |              |                        |            |           |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:552

Site Designation:LMA-458 Repair Type: Erosion Rating:Area of Concern Field Date:8/16/2017

Notes:



| LM Start | 1.29 Rating ** U Issue No. |                | 101      |                  |     |             |   |
|----------|----------------------------|----------------|----------|------------------|-----|-------------|---|
| LM End   | 1.56                       | Issue Type +   | Ma       | Location *       | WS  |             | - |
|          |                            | nen Levee      |          | GPS Latitude/Lor |     |             |   |
| Category |                            |                | Start    |                  | End |             |   |
| Item     | Vegetatio                  | n              |          | 37.82066         | 8°  | 37.822239   | 0 |
| пеш      |                            |                |          | -121.33649       | 1°  | -121.340589 | 0 |
| DWR ID   | DWR_RD0                    | 544_02_f _ 201 | 7_101    |                  |     |             |   |
|          |                            | Comn           | nent Cod | le               |     |             |   |

V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

### Photo 1 of 1: FA\_2018\_RD0544\_109\_101\_20180906\_00093.jpg



Looking northwest at the waterside slope.

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 1.29      | Rating **      | U        | Issue No.  | 102    |              |  |
|--|-----------|----------------|----------|------------|--------|--------------|--|
| LM End   | 1.56      | Issue Type +   | Ma       | Location * | LS     |              |  |
| Catagori Earthen Levee   |           |                |          | GPS La     | atitud | e/Longitude  |  |
| Calegory   | Category  |                |          |            |        | End          |  |
| Item   | Vegetatio | n              |          | 37.8206    | 68°    | 37.822239°   |  |
| пеш  | item      |                |          |            | 91°    | -121.340589° |  |
| DWR ID   | DWR_RD0   | 544_02_f _ 201 | 7_102    |            |        |              |  |
|  |           | Comn           | nent Coc | de         |        |              |  |
| V2 : Remove the wild growth other than native grasses from the levee slopes. |           |                |          |            |        |              |  |
| Inspector Comment  |           |                |          |            |        |              |  |
|  |           |                |          |            |        |              |  |

Photo 1 of 1: FA\_2018\_RD0544\_109\_102\_20180906\_00094.jpg



Looking northwest at the landside slope.

| 1.34                             | Rating **                | М  | Issue No.   |   | 56   |  |
|----------------------------------|--------------------------|--|---|---|--|--|
| 1.45                             | Issue Type +             | Ма   | Location *  |   | LS   |  |
| Cotogon/ Earthen Levee           |                          |  | GPS La  | atitud  | le/Longitude   |  |
| Category                         |                          |  |   |   | End  |  |
| Animal Co                        | ontrol                   |  | 37.8211   | 68°   | 37.822083°   |  |
|                                  |                          |  | -121.3372   | 12°   | -121.338862°   |  |
| DWR ID DWR_RD0544_02_s _ 2015_56 |                          |  |   |   |  |  |
|                                  | 1.45 Earthen L Animal Co | 1.45 Issue Type + Earthen Levee Animal Control | 1.45 Issue Type + Ma Earthen Levee Animal Control | 1.45         Issue Type +         Ma         Location *           Earthen Levee         GPS La           Start         Start           Animal Control         37.8211           -121.3372 | 1.45   Issue Type +   Ma   Location *    Earthen Levee   GPS Latitud |  |

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

No Photos

| LM Start               | 1.38       | Rating **      | U                      | Issue No.  |     | 10          |   |
|------------------------|------------|----------------|------------------------|------------|-----|-------------|---|
| LM End                 | 1.38       | Issue Type +   | Ma                     | Location * |     | LS          |   |
| Category Earthen Levee |            |                | GPS Latitude/Longitude |            |     |             |   |
| Category               |            |                |                        | Start      |     | End         |   |
| Item                   | Vegetation |                |                        | 37.8214    | 23° | 37.821423   | 0 |
| item                   |            |                |                        | -121.3378  | 78° | -121.337878 | 0 |
| DWR ID                 | DWR_RD0    | 544_02_s _ 201 | 2_10                   |            |     |             |   |
|                        |            | Comn           | nent Cod               | de         |     |             |   |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

Dense elderberry on landside slope and toe.

No Photos

| * Location                        | ** Rating                |   | + Issue Type                      |
|-----------------------------------|--------------------------|---|-----------------------------------|
| LS: Land Side N/A: Not Applicable | A : Acceptable           | N : Not Inspected/Rated                 | Ma : Maintenance Deficiancy       |
| WS: Water Side                    | M : Minimally Acceptable | C : Corrected                           | Ob : Design & System Obsolescence |
| CR : Crown                        | U : Unacceptable         | A/W : Acceptable but Monitor & Maintain | En: Enforcement                   |

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 1.40            | Rating **    | М                      | Issue No.     |     | 22           |  |
|----------------------------------|-----------------|--------------|------------------------|---------------|-----|--------------|--|
| LM End                           | 1.42            | Issue Type + | Ма                     | Location *    | LS  |              |  |
| Category Earthen Levee           |                 |              | GPS Latitude/Longitude |               |     |              |  |
|                                  |                 |              | Start                  |               | End |              |  |
| Itom                             | Slope Stability |              |                        | 37.8215       | 18° | 37.821697°   |  |
| Item                             |                 |              |                        | -121.3380     | 92° | -121.338397° |  |
| DWR ID DWR_RD0544_02_s _ 2012_22 |                 |              |                        |               |     |              |  |
| Comment Code                     |                 |              |                        |               |     |              |  |
| S2 · Donai                       | r the levee     | clopo damao  | od by yo               | hiclo traffic | and | nrovent      |  |

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

Damage caused by vehicle traffic.

| LM Start | 1.40 | Rating **    | М  | Issue No.  | 22 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 1.42 | Issue Type + | Ма | Location * | LS        |



Looking northwest at slope damage caused by vehicle traffic.

Photo 2 of 2: FA\_2018\_RD0544\_109\_22\_20180906\_00021.jpg



Looking northwest at slope damage caused bey vehicle traffic (Fall

| LM Start                         | 1.43                 | Rating **    | U     | Issue No.              |     | 29         |  |
|----------------------------------|----------------------|--------------|-------|------------------------|-----|------------|--|
| LM End                           | 1.47                 | Issue Type + | Ma    | Location *             | WS  |            |  |
| Category Earthen Levee           |                      |              |       | GPS Latitude/Longitude |     |            |  |
| Category                         |                      |              | Start |                        | End |            |  |
| Item                             | Vegetation           |              |       |                        | 5°  | 37.822280° |  |
| пеш                              | -121.338553 ° -121.3 |              |       |                        |     |            |  |
| DWR ID DWR_RD0544_02_f _ 2018_29 |                      |              |       |                        |     |            |  |
| Comment Code                     |                      |              |       |                        |     |            |  |

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Dense veg on waterward slope.

## Photo 1 of 1 : FA\_2018\_RD0544\_109\_29\_20180919\_00127.jpg



Looking southeast at dense veg on waterward shoulder and slope. (Fall 2018)

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 1.44                   | Rating **    | М         | Issue No.  |                        | 28         |  |
|----------------------------------|------------------------|--------------|-----------|------------|------------------------|------------|--|
| LM End                           | 1.44                   | Issue Type + | Ма        | Location * |                        | WS         |  |
| Catagony                         | Catagoni Earthen Levee |              |           |            | GPS Latitude/Longitude |            |  |
| Category                         |                        |              |           | Start      |                        | End        |  |
| Item                             | , Animal Control       |              |           | 37.8219    | 54°                    | 37.821954° |  |
| пеш                              |                        |              | -121.3387 | 15°        | -121.338715 °          |            |  |
| DWR ID DWR_RD0544_02_s _ 2012_28 |                        |              |           |            |                        |            |  |
| Comment Code                     |                        |              |           |            |                        |            |  |

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

No Photos

| LM Start                         | 1.46          | Rating **    | С  | Issue No.              |     | 23            |  |  |  |
|----------------------------------|---------------|--------------|----|------------------------|-----|---------------|--|--|--|
| LM End                           | 1.46          | Issue Type + | Ma | Location *             | LS  |               |  |  |  |
| Category Earthen Levee           |               |              |    | GPS Latitude/Longitude |     |               |  |  |  |
| Calegory                         |               |              |    | Start                  |     | End           |  |  |  |
| Item                             | Encroachments |              |    | 37.82208               | 32° | 37.822082 °   |  |  |  |
| item                             |               |              |    | -121.33893             | 32° | -121.338932 ° |  |  |  |
| DWR ID DWR_RD0544_02_s _ 2012_23 |               |              |    |                        |     |               |  |  |  |
|                                  | Comment Code  |              |    |                        |     |               |  |  |  |

Comment Code

TR : Tree or limb

### Inspector Comment

Dead tree and limbs should be removed from landside shoulder and slope.

No Photos

| LM Start | 1.86                  | Rating **              | U     | Issue No.  |     | 38           |
|----------|-----------------------|------------------------|-------|------------|-----|--------------|
| LM End   | 1.86                  | Issue Type +           | Ma    | Location * |     | WS           |
| Category | evee                  | GPS Latitude/Longitude |       |            |     |              |
| Calegory |                       |                        | Start |            | End |              |
| Item     | Erosion / Bank Caving |                        |       |            | 33° | 37.817983°   |
| пеш      |                       |                        |       | -121.3416  | 32° | -121.341682° |
| DWR ID   | DWR_RD0               | 544_02_s _ 201         | 5_38  |            |     |              |

Comment Code E1 : Note and monitor erosion site.

Inspector Comment

Erosion/Caving on waterside shoulder and slope 18" x 6" x 15'.

Photo 1 of 2 : FA\_2018\_RD0544\_109\_38\_20180906\_00031.jpg



Looking southeast at erosion/caving on waterward slope.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
D: Unacceptable
AW: Acceptable
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

### Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

## Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start   | 1.86        | Rating **      | U        | Issue No.    |      | 38 (cont)     |  |  |
|--|-------------|----------------|----------|--------------|------|---------------|--|--|
| LM End   | 1.86        | Issue Type +   | Ma       | Location *   |      | WS            |  |  |
| Category   | evee        | GPS La         | atitud   | le/Longitude |      |               |  |  |
| Calegory   |             |                |          | Start        |      | End           |  |  |
| Item   | Erosion / I | Bank Caving    |          | 37.8179      | 83°  | 37.817983°    |  |  |
| пеш  |             |                |          | -121.3416    | 82 ° | -121.341682 ° |  |  |
| DWR ID DWR_RD0544_02_s _ 2015_38                               |             |                |          |              |      |               |  |  |
|  |             | Comn           | nent Cod | de           |      |               |  |  |
| E1 : Note  | and monito  | r erosion site |          |              |      |               |  |  |
| Inspector Comment  |             |                |          |              |      |               |  |  |
| Erosion/Caving on waterside shoulder and slope 18" x 6" x 15'. |             |                |          |              |      |               |  |  |
|  |             |                |          |              |      |               |  |  |
|  |             |                |          |              |      |               |  |  |

Photo 2 of 2 : FA\_2018\_RD0544\_109\_38\_20180906\_00032.jpg

Looking east at erosion/caving on waterward slope.

| LM Start                         | 1.91              | Rating **       | М         | Issue No.  |              | 34         |  |  |  |
|----------------------------------|-------------------|-----------------|-----------|------------|--------------|------------|--|--|--|
| LM End                           | 1.91              | Issue Type +    | Ma        | Location * | WS           |            |  |  |  |
| Category Earthen Levee           |                   |                 | GPS La    | atitud     | e/Longitude  |            |  |  |  |
| Calegory                         |                   |                 |           | Start      |              | End        |  |  |  |
| Erosion / Bank Caving            |                   |                 |           | 37.8176    | 58°          | 37.817658° |  |  |  |
| пеш                              |                   |                 | -121.3420 | 97°        | -121.342097° |            |  |  |  |
| DWR ID DWR_RD0544_02_f _ 2018_34 |                   |                 |           |            |              |            |  |  |  |
|                                  | Comment Code      |                 |           |            |              |            |  |  |  |
| E1 : Note a                      | and monito        | or erosion site |           |            |              |            |  |  |  |
|                                  |                   |                 |           |            |              |            |  |  |  |
|                                  | Inspector Comment |                 |           |            |              |            |  |  |  |
| Erosion cause by foot traffic    |                   |                 |           |            |              |            |  |  |  |
|                                  |                   |                 |           |            |              |            |  |  |  |
|                                  |                   |                 |           |            |              |            |  |  |  |
|                                  |                   |                 |           |            |              |            |  |  |  |

| LM Start | 1.91 | Rating **    | М  | Issue No.  | 34 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 1.91 | Issue Type + | Ma | Location * | WS        |

# Photo 1 of 2 : FA\_2018\_RD0544\_109\_34\_20180919\_00130.jpg



Looking west at erosion on waterward slope. (Fall 2018)

Photo 2 of 2: FA\_2018\_RD0544\_109\_34\_20180919\_00131.jpg



Looking east at foot erosion on waterward slope. (Fall 2018)

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence U: Unacceptable U: Unacceptable but Monitor & Maintain

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start  | 2.02      | Rating **              | U        | Issue No.  | 58  |               |  |
|---|-----------|------------------------|----------|------------|-----|---------------|--|
| LM End  | 2.09      | Issue Type +           | Ma       | Location * | LS  |               |  |
| Catagory  | evee      | GPS Latitude/Longitude |          |            |     |               |  |
| Calegory  | ategory   |                        |          |            |     | End           |  |
| Item  | Animal Co | nimal Control          |          |            | 53° | 37.819493°    |  |
| пеш   |           |                        |          | -121.3434  | 73° | -121.344545 ° |  |
| DWR ID  | DWR_RD0   | 544_02_s _ 201         | 5_58     |            |     |               |  |
|   |           | Comn                   | nent Cod | de         |     |               |  |
| A1 : Exterminate rodents and backfill and compact or grout burrows. |           |                        |          |            |     | t burrows.    |  |
|   |           |                        |          |            |     |               |  |
|   |           | Inspecto               | or Comm  | nent       |     |               |  |

Several rodent holes within reach on landside slope.



Looking at typical rodent holes on landward slope.

| LM Start                         | 2.07      | Rating **    | U  | Issue No.              |      | 13            |  |
|----------------------------------|-----------|--------------|----|------------------------|------|---------------|--|
| LM End                           | 2.09      | Issue Type + | Ma | Location *             | LS   |               |  |
| Category Earthen Levee           |           |              |    | GPS Latitude/Longitude |      |               |  |
| Category                         |           |              |    | Start                  |      | End           |  |
| Item                             | Vegetatio | n            |    | 37.8193                | 37°  | 37.819460 °   |  |
| item                             |           |              |    | -121.3442              | 75 ° | -121.344492 ° |  |
| DWR ID DWR_RD0544_02_s _ 2012_13 |           |              |    |                        |      |               |  |
| Comment Code                     |           |              |    |                        |      |               |  |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

| LM Start          | 2.12         | Rating **      | С        | Issue No.    |           | 59           |   |
|-------------------|--------------|----------------|----------|--------------|-----------|--------------|---|
| LM End            | 2.12         | Issue Type +   | Ма       | Location *   |           | LS           |   |
| Category          | Earthen L    | evee GP        |          | GPS La       | atitud    | de/Longitude |   |
| Calegory          |              |                |          | Start        |           | End          |   |
| Trim / Thin Trees |              |                | 37.8197  | 38°          | 37.819738 | 0            |   |
| item              |              |                |          | -121.3449    | 22 °      | -121.344922  | 0 |
| DWR ID            | DWR_RD0      | 544_02_s _ 201 | 5_59     |              |           |              |   |
|                   |              | Comn           | nent Cod | le           |           |              |   |
| T1 : Trim t       | rees to at I | east five feet | above gi | round level. |           |              |   |

Inspector Comment

Untrimmed trees on landside shoulder and slope.

No Photos

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.17         | Rating **              | A/W   | Issue No.  |     | 87           |  |
|----------------------------------|--------------|------------------------|-------|------------|-----|--------------|--|
| LM End                           | 2.18         | Issue Type +           | Ма    | Location * |     |              |  |
| Category                         | ental        | GPS Latitude/Longitude |       |            |     |              |  |
| Calegory                         |              |                        | Start |            |     | End          |  |
| Item                             | 2017 Stor    | m Damage               |       | 37.8203    | 00° | 37.820300°   |  |
| пеш                              |              |                        |       | -121.3456  | 00° | -121.345700° |  |
| DWR ID DWR_RD0544_02_f _ 2017_87 |              |                        |       |            |     |              |  |
|                                  | Comment Code |                        |       |            |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

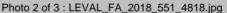
Site ID No:551

Site Designation:LMA-457 Repair Type: Erosion

Rating:Serious Field Date:8/18/2017

| LM Start | 2.17 | Rating **    | A/W | Issue No.  | 87 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 2.18 | Issue Type + | Ma  | Location * |           |







# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.17      | Rating **    | A/W        | Issue No.              |              | 87 (cont)  |
|----------------------------------|-----------|--------------|------------|------------------------|--------------|------------|
| LM End                           | 2.18      | Issue Type + | Ма         | Location *             |              |            |
| Supplemental                     |           |              |            | GPS Latitude/Longitude |              |            |
| Calegory                         | Category  |              |            | Start                  |              | End        |
| Item                             | 2017 Stor | m Damage     |            | 37.82030               | 00°          | 37.820300° |
| пеш                              |           |              | -121.34560 | 00°                    | -121.345700° |            |
| DWR ID DWR_RD0544_02_f _ 2017_87 |           |              |            |                        |              |            |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:551

Site Designation:LMA-457 Repair Type: Erosion

Rating:Serious Field Date:8/18/2017

Notes:



| LM Start                         | 2.18         | Rating **    | A/W | Issue No.              |     | 88            |  |
|----------------------------------|--------------|--------------|-----|------------------------|-----|---------------|--|
| LM End                           | 2.19         | Issue Type + | Ma  | Location *             |     |               |  |
| Category                         |              |              |     | GPS Latitude/Longitude |     |               |  |
| Calegory                         | Start        |              |     |                        | End |               |  |
| Item                             | 2017 Stor    | m Damage     |     | 37.8204                | 00° | 37.820500°    |  |
| item                             |              |              |     | -121.34580             | 00° | -121.345900 ° |  |
| DWR ID DWR_RD0544_02_f _ 2017_88 |              |              |     |                        |     |               |  |
|                                  | Comment Code |              |     |                        |     |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:550

Site Designation:LMA-456

Repair Type: Erosion Rating:Area of Concern

Field Date:8/18/2017 Notes:

WS: Water Side



A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.18      | Rating **              | A/W      | Issue No.  | 88 (cont) |              |
|----------------------------------|-----------|------------------------|----------|------------|-----------|--------------|
| LM End                           | 2.19      | Issue Type +           | Ма       | Location * |           |              |
| Category                         | ental     | GPS Latitude/Longitude |          |            |           |              |
| Calegory                         |           |                        |          | Start End  |           |              |
| Item                             | 2017 Stor | m Damage               |          | 37.8204    | 00°       | 37.820500°   |
| пеш                              |           |                        |          | -121.3458  | 00°       | -121.345900° |
| DWR ID DWR_RD0544_02_f _ 2017_88 |           |                        |          |            |           |              |
|                                  |           | Comn                   | nent Cod | de         |           |              |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:550

Site Designation:LMA-456 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

| LM Start | 2.18 | Rating **    | A/W | Issue No.  | 88 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 2.19 | Issue Type + | Ma  | Location * |           |



Photo 3 of 4: LEVAL\_FA\_2018\_550\_4570.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.18                        | Rating **    | A/W | Issue No.              | 88 (cont) |               |  |  |
|----------|-----------------------------|--------------|-----|------------------------|-----------|---------------|--|--|
| LM End   | 2.19                        | Issue Type + | Ма  | Location *             |           |               |  |  |
| Category | Suppleme                    | ental        |     | GPS Latitude/Longitude |           |               |  |  |
| Calegory | Salegory                    |              |     |                        |           | End           |  |  |
| Item     | 2017 Stor                   | m Damage     |     | 37.82040               | 00°       | 37.820500°    |  |  |
| пеш      |                             |              |     | -121.34580             | 00°       | -121.345900 ° |  |  |
| DWR ID   | D DWR_RD0544_02_f _ 2017_88 |              |     |                        |           |               |  |  |
|          | Comment Code                |              |     |                        |           |               |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:550

Site Designation:LMA-456 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:



| LM Start               | 2.20         | Rating **      | С    | Issue No.              |    | 60        |   |  |  |
|------------------------|--------------|----------------|------|------------------------|----|-----------|---|--|--|
| LM End                 | 2.20         | Issue Type +   | Ма   | Location *             |    | LS        |   |  |  |
| Category Earthen Levee |              |                |      | GPS Latitude/Longitude |    |           |   |  |  |
| Calegory               |              |                |      | Start                  |    | End       |   |  |  |
| ltom                   | Trim / Thi   | n Trees        |      | 37.82065               | 5° | 37.820655 | 0 |  |  |
| Item                   |              | -121.34598     | 2°   | -121.345982            | 0  |           |   |  |  |
| DWR ID                 | DWR_RD0      | 544_02_s _ 201 | 5_60 |                        |    |           |   |  |  |
|                        | Comment Code |                |      |                        |    |           |   |  |  |

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

le A:

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.21         | Rating **    | М  | Issue No.              | 32  |               |  |  |
|----------------------------------|--------------|--------------|----|------------------------|-----|---------------|--|--|
| LM End                           | 2.21         | Issue Type + | Ма | Location *             | WS  |               |  |  |
| Category Earthen Levee           |              |              |    | GPS Latitude/Longitude |     |               |  |  |
|                                  |              |              |    | Start                  |     | End           |  |  |
| Item                             | Animal Co    | ontrol       |    | 37.820697              |     | 37.820697°    |  |  |
| пеш                              |              |              |    | -121.3460              | 50° | -121.346050 ° |  |  |
| DWR ID DWR_RD0544_02_s _ 2012_32 |              |              |    |                        |     |               |  |  |
|                                  | Comment Code |              |    |                        |     |               |  |  |

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

| LM Start               | 2.24      | Rating **      | M    | Issue No.              |     | 33          |  |  |
|------------------------|-----------|----------------|------|------------------------|-----|-------------|--|--|
| LM End                 | 2.35      | Issue Type +   | Ma   | Location *             |     | LS          |  |  |
| Category Earthen Levee |           |                |      | GPS Latitude/Longitude |     |             |  |  |
| Calegory               |           |                |      | Start                  |     | End         |  |  |
| Item                   | Animal Co | ontrol         |      | 37.8210                | 96° | 37.821945 ° |  |  |
| item                   |           | -121.3464      | 18°  | -121.347897°           |     |             |  |  |
| DWR ID                 | DWR_RD0   | 544_02_s _ 201 | 2_33 |                        |     | ·           |  |  |

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

No Photos

| LM Start               | 2.28       | Rating **      | С    | Issue No.              | 61  |               |  |  |
|------------------------|------------|----------------|------|------------------------|-----|---------------|--|--|
| LM End                 | 2.28       | Issue Type +   | Ma   | Location *             |     | LS            |  |  |
| Category Earthen Levee |            |                |      | GPS Latitude/Longitude |     |               |  |  |
| Calegory               |            |                |      | Start                  |     | End           |  |  |
| Item                   | Trim / Thi | n Trees        |      | 37.8214                | 73° | 37.821473°    |  |  |
| item                   |            |                |      | -121.3468              | 60° | -121.346860 ° |  |  |
| DWR ID                 | DWR_RD0    | 544_02_s _ 201 | 5_61 |                        |     | ·             |  |  |

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Untrimmed tree on landside shoulder. Tree was trimmed but still requires additional trimming.

No Photos

\* Location

LS : Land Side N/A : Not Applicable

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                | 2.31    | Rating **              | М  | Issue No.  | 11         |               |  |
|-------------------------|---------|------------------------|----|------------|------------|---------------|--|
| LM End                  | 2.31    | Issue Type +           | Ма | Location * | WS         |               |  |
| Catagony                | ental   | GPS Latitude/Longitude |    |            |            |               |  |
| Category                |         |                        |    | Start      |            | End           |  |
| Item                    | DWR Ero | sion Survey            |    | 37.8217    | 37.821763° |               |  |
| item                    |         |                        |    | -121.3472  | 75 °       | -121.347275 ° |  |
| DWR ID RD0544U02RM33.21 |         |                        |    |            |            |               |  |
| Comment Code            |         |                        |    |            |            |               |  |

### Inspector Comment

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/20/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The data were estimated as the site is underneath a irrigation pump station and inaccessible by boat or land survey. It?s possible the pump station played a role in the erosion. [2017 Site ID:RD0544U02RM33.21]

| LM Start | 2.31 | Rating **    | М  | Issue No.  | 11 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.31 | Issue Type + | Ma | Location * | WS        |

# Photo 1 of 3 : FA\_2018\_RD0544\_109\_11\_20180906\_00012.jpg



Front view of the erosion site. View is partially blocked by the pump structure and vegetation at the site.

### Photo 2 of 3: FA\_2018\_RD0544\_109\_11\_20180906\_00013.jpg



Front view of the site.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.31     | Rating **    | M  | Issue No.  |                        | 11 (cont)     |  |
|----------|----------|--------------|----|------------|------------------------|---------------|--|
| LM End   | 2.31     | Issue Type + | Ма | Location * |                        | WS            |  |
| Category | Suppleme | Supplemental |    |            | GPS Latitude/Longitude |               |  |
| Calegory |          |              |    | Start      |                        | End           |  |
| Item     | DWR Ero  | sion Survey  |    | 37.8217    | 63 °                   | 37.821763°    |  |
| item     |          |              |    | -121.3472  | 75 °                   | -121.347275 ° |  |
| DWR ID   | RD0544U0 | 2RM33.21     |    |            |                        |               |  |

### Inspector Comment

Comment Code

09/13/2017: No significant change observed.

07/25/2016: No significant change observed.

06/25/2015: No significant change observed.

07/02/2014: No significant change observed.

08/20/2013: No significant change observed.

08/07/2012: The site was first reported in 2012 spring levee inspection report. The data were estimated as the site is underneath a irrigation pump station and inaccessible by boat or land survey. It?s possible the pump station played a role in the erosion. [2017 Site ID:RD0544U02RM33.21]

# Photo 3 of 3: FA\_2018\_RD0544\_109\_11\_20180906\_00014.jpg



Close view of the site.

| LM Start     | 2.32                      | Rating **    | A/W | Issue No.              |     | 89            |  |  |
|--------------|---------------------------|--------------|-----|------------------------|-----|---------------|--|--|
| LM End       | 2.33                      | Issue Type + | Ma  | Location *             |     |               |  |  |
| Category     |                           |              |     | GPS Latitude/Longitude |     |               |  |  |
| Calegory     |                           |              |     | Start                  |     | End           |  |  |
| Item         | 2017 Storm Damage         |              |     | 37.82180               | 00° | 37.821900°    |  |  |
| пеш          |                           |              |     | -121.34750             | 00° | -121.347600 ° |  |  |
| DWR ID       | DWR_RD0544_02_f _ 2017_89 |              |     |                        |     | ·             |  |  |
| Comment Code |                           |              |     |                        |     |               |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:549

Site Designation:LMA-455 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.32         | Rating **                | A/W                    | Issue No.  |     | 89 (cont)    |
|----------|--------------|--------------------------|------------------------|------------|-----|--------------|
| LM End   | 2.33         | Issue Type +             | Ма                     | Location * |     |              |
| Category |              |                          | GPS Latitude/Longitude |            |     |              |
| Calegory |              |                          |                        | Start      |     | End          |
| Item     | 2017 Stor    | m Damage                 |                        | 37.82180   | 00° | 37.821900 °  |
| пеш      |              |                          |                        | -121.34750 | 00° | -121.347600° |
| DWR ID   | DWR_RD0      | WR_RD0544_02_f _ 2017_89 |                        |            |     |              |
|          | Comment Code |                          |                        |            |     |              |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:549 Site Designation:LMA-455 Repair Type: Erosion

Rating:Area of Concern Field Date:8/18/2017

Notes:

| LM Start | 2.32 | Rating **    | A/W | Issue No.  | 89 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 2.33 | Issue Type + | Ma  | Location * |           |





# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 2.41        | Rating **      | U                      | Issue No.   |       | 73            |
|------------------------|-------------|----------------|------------------------|-------------|-------|---------------|
| LM End                 | 2.59        | Issue Type +   | Ma                     | Location *  |       | LS            |
| Category Earthen Levee |             |                | GPS Latitude/Longitude |             |       |               |
| Calegory               |             |                |                        | Start       |       | End           |
| Item                   | Vegetation  |                |                        | 37.821423°  |       | 37.819153°    |
| пеш                    |             |                |                        | -121.3488   | 49°   | -121.350231 ° |
| DWR ID                 | DWR_RD0     | 544_02_f _ 201 | 7_73                   |             |       |               |
| Comment Code           |             |                |                        |             |       |               |
| V2 : Remo              | ve the wild | d growth other | than na                | tive grasse | s fro | m the levee   |

slopes.

Inspector Comment



Looking southwest at the landside slope.

| LM Start               | 2.57                           | Rating **    | A/W | Issue No.              |      | 75           |  |  |
|------------------------|--------------------------------|--------------|-----|------------------------|------|--------------|--|--|
| LM End                 | 2.57                           | Issue Type + | Ma  | Location *             | WS   |              |  |  |
| Category Earthen Levee |                                |              |     | GPS Latitude/Longitude |      |              |  |  |
| Calegory               |                                |              |     | Start Er               |      | End          |  |  |
| Item                   | Encroachments                  |              |     | 37.8193                | 73 ° | 37.819373°   |  |  |
| item                   |                                |              |     | -121.3500              | 77 ° | -121.350077° |  |  |
| DWR ID                 | R ID DWR_RD0544_02_s _ 2017_75 |              |     |                        |      |              |  |  |
| Comment Code           |                                |              |     |                        |      |              |  |  |

TR: Tree or limb

Inspector Comment

Dead tree limbs on waterside slope.

No Photos

| LM Start               | 2.61      | Rating **    | U    | Issue No.              |     | 69          |   |
|------------------------|-----------|--------------|------|------------------------|-----|-------------|---|
| LM End                 | 2.61      | Issue Type + | Ma   | Location *             |     | WS          |   |
| Category Earthen Levee |           |              |      | GPS Latitude/Longitude |     |             |   |
| Calegory               |           |              |      | Start                  |     | End         |   |
| Item                   | Erosion / | Bank Caving  |      | 37.8188                | 06° | 37.818806   | 0 |
| пеш                    |           |              |      | -121.3504              | 37° | -121.350437 | 0 |
| DWR ID                 | DWR RD0   | 544 02 f 201 | 6 69 |                        |     |             |   |

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.

# Photo 1 of 5: FA\_2018\_RD0544\_109\_69\_20180906\_00047.jpg



Looking south at erosion on shoulder. (Spring 2018)

\* Location N/A: Not Applicable LS: Land Side

WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start               | 2.61                      | Rating **    | U                      | Issue No.  |     | 69 (cont)   |  |
|------------------------|---------------------------|--------------|------------------------|------------|-----|-------------|--|
| LM End                 | 2.61                      | Issue Type + | Ma                     | Location * |     | WS          |  |
| Category Earthen Levee |                           |              | GPS Latitude/Longitude |            |     |             |  |
| Calegory               |                           |              |                        | Start      |     | End         |  |
| Item                   | Erosion / Bank Caving     |              |                        | 37.818806° |     | 37.818806   |  |
| item                   |                           |              |                        | -121.3504  | 37° | -121.350437 |  |
| DWR ID                 | DWR_RD0544_02_f _ 2016_69 |              |                        |            |     |             |  |
|                        | Comment Code              |              |                        |            |     |             |  |

E2 : Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.

| LM Start | 2.61 | Rating **    | U  | Issue No.  | 69 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.61 | Issue Type + | Ma | Location * | WS        |

### Photo 2 of 5 : FA\_2018\_RD0544\_109\_69\_20180906\_00048.jpg



Looking east at erosion on waterward slope. (Spring 2018)

### Photo 3 of 5: FA\_2018\_RD0544\_109\_69\_20180906\_00049.jpg



Looking south at erosion on waterward shoulder and slope.

| LM Start | 2.61 | Rating **    | U  | Issue No.  | 69 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 2.61 | Issue Type + | Ma | Location * | WS        |



Looking south at waterward erosion.

| * Location   | ** Rating  |   | + Issue Type   |
|--|--|---|--|
| LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.61      | Rating **    | U  | Issue No.              |    | 69 (cont)     |  |
|----------------------------------|-----------|--------------|----|------------------------|----|---------------|--|
| LM End                           | 2.61      | Issue Type + | Ma | Location *             | WS |               |  |
| Category Earthen Levee           |           |              |    | GPS Latitude/Longitude |    |               |  |
| Calegory                         | Category  |              |    | Start                  |    | End           |  |
| Item                             | Erosion / | Bank Caving  |    | 37.81880               | 6° | 37.818806°    |  |
| пеш                              |           |              |    | -121.35043             | 7° | -121.350437 ° |  |
| DWR ID DWR_RD0544_02_f _ 2016_69 |           |              |    |                        |    |               |  |
| Comment Code                     |           |              |    |                        |    |               |  |

E2 : Schedule repair of erosion site prior to the next inspection.

### Inspector Comment

Erosion greater than 1' deep and greater than 3' wide. Owner backfilled erosion with rock 3/4 filled. Still need to backfill the remaining erosion.



Looking north at erosion on waterward shoulder and slope.

| LM Start                         | 2.67           | Rating **    | М                      | Issue No.  |     | 76           |  |
|----------------------------------|----------------|--------------|------------------------|------------|-----|--------------|--|
| LM End                           | 2.67           | Issue Type + | Ma                     | Location * |     | LS           |  |
| Category Earthen Levee           |                |              | GPS Latitude/Longitude |            |     |              |  |
|                                  |                |              | Start                  |            | End |              |  |
| Item                             | Animal Control |              |                        | 37.8181    | 12° | 37.818112°   |  |
| item                             |                |              |                        | -121.3511  | 08° | -121.351108° |  |
| DWR ID DWR_RD0544_02_s _ 2017_76 |                |              |                        |            |     |              |  |
| Comment Code                     |                |              |                        |            |     |              |  |

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

No Photos

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 2.68     | Rating **    | М  | Issue No.              |     | 7            |
|--------------|----------|--------------|----|------------------------|-----|--------------|
| LM End       | 2.70     | Issue Type + | Ма | Location *             |     | WS           |
| Supplemental |          |              |    | GPS Latitude/Longitude |     |              |
| Calegory     | Category |              |    | Start                  |     | End          |
| Item         | DWR Ero  | sion Survey  |    | 37.8179                | 05° | 37.817905 °  |
| пеш          | item     |              |    | -121.351102°           |     | -121.351102° |
| DWR ID       | RD0544U0 | 2RM32.91     |    |                        |     | ·            |

# Comment Code

Inspector Comment

09/13/2017: No significant change observed. 07/25/2016: No significant change observed. 06/25/2015: No significant change observed.

07/02/2014: No significant change observed. 10/11/2013: No significant change observed.

08/07/2012: Series of pocket erosion were discovered at the levee toe during the boat survey. The area is covered with vegetation and riprap, but the rip rap has been washed away. [2017 Site ID:RD0544U02RM32.91]



# Photo 1 of 2 : FA\_2018\_RD0544\_109\_7\_20180906\_00004.jpg



Front view of the pocket erosion. Note vegetation and riprap at the site.

Photo 2 of 2: FA\_2018\_RD0544\_109\_7\_20180906\_00005.jpg



Front view of the pocket erosion.

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start | 2.68      | Rating **      | A/W  | Issue No.              |     | 90            |
|----------|-----------|----------------|------|------------------------|-----|---------------|
| LM End   | 2.71      | Issue Type +   | Ма   | Location *             |     |               |
| Category |           |                |      | GPS Latitude/Longitude |     |               |
| Calegory |           |                |      | Start                  |     | End           |
| Item     | 2017 Stor | m Damage       |      | 37.8180                | 00° | 37.817800 °   |
| пеш      |           |                |      | -121.35120             | 00° | -121.351500 ° |
| DWR ID   | DWR_RD0   | 544_02_f _ 201 | 7_90 |                        |     |               |

### Inspector Comment

Comment Code

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:548

Site Designation:LMA-454 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

| LM Start | 2.68 | Rating **    | A/W | Issue No.  | 90 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 2.71 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_548\_4666.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.68      | Rating **    | A/W                    | Issue No.  |              | 90 (cont)  |  |
|----------------------------------|-----------|--------------|------------------------|------------|--------------|------------|--|
| LM End                           | 2.71      | Issue Type + | Ма                     | Location * |              |            |  |
| Supplemental                     |           |              | GPS Latitude/Longitude |            |              |            |  |
| Calegory                         | Category  |              |                        | Start      |              | End        |  |
| Item                             | 2017 Stor | m Damage     |                        | 37.8180    | 00°          | 37.817800° |  |
| пеш                              |           |              | -121.3512              | 00°        | -121.351500° |            |  |
| DWR ID DWR_RD0544_02_f _ 2017_90 |           |              |                        |            |              |            |  |
| Comment Code                     |           |              |                        |            |              |            |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:548

Site Designation:LMA-454 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:



| LM Start  | 2.69       | Rating **      | U      | Issue No.     |             | 52           |  |
|---|------------|----------------|--------|---------------|-------------|--------------|--|
| LM End  | 3.11       | Issue Type +   | Ma     | Location *    |             | CR           |  |
| Category Earthen Levee                          |            |                | GPS La | atitud        | e/Longitude |              |  |
|   |            |                |        | Start         |             | End          |  |
| Item  | Vegetation |                |        | 37.817928°    |             | 37.817698°   |  |
| пеш   |            |                |        | -121.351355 ° |             | -121.358582° |  |
| DWR ID  | DWR_RD0    | 544_02_f _ 201 | 4_52   |               |             |              |  |
| Comment Code                                    |            |                |        |               |             |              |  |
| V9 : Keep the crown roadway free of vegetation. |            |                |        |               |             |              |  |
|   |            |                |        |               |             |              |  |

Inspector Comment



Looking south at veg on levee crown. (Spring 2018)

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# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start  | 2.69      | Rating **      | U        | Issue No.              | 52 (cont) |              |
|-----------|-----------|----------------|----------|------------------------|-----------|--------------|
| LM End    | 3.11      | Issue Type +   | Ma       | Location *             |           | CR           |
| Category  | Earthen L | evee           |          | GPS La                 | atitud    | le/Longitude |
| Category  |           |                |          | Start                  |           | End          |
| Item      | Vegetatio | n              |          | 37.8179                | 28°       | 37.817698 °  |
| пеш       |           |                |          | -121.351355 ° -121.358 |           |              |
| DWR ID    | DWR_RD0   | 544_02_f _ 201 | 4_52     |                        |           |              |
|           |           | Comn           | nent Cod | de                     |           |              |
| V9 : Keep | the crown | roadway free   | of veget | ation.                 |           |              |
|           |           | Inspecto       | or Comm  | nent                   |           |              |
|           |           |                |          |                        |           |              |
|           |           |                |          |                        |           |              |
|           |           |                |          |                        |           |              |
|           |           |                |          |                        |           |              |

| LM Start | 2.69 | Rating **    | U  | Issue No.  | 52 (cont) |
|----------|------|--------------|----|------------|-----------|
| LM End   | 3.11 | Issue Type + | Ma | Location * | CR        |



Looking south at vegetation on levee crown.

Photo 3 of 3: FA\_2018\_RD0544\_109\_52\_20180906\_00037.jpg



Looking southwest at levee crown.

| LM Start   | 2.71       | Rating **    | U        | Issue No.  |        | 43            |
|--|------------|--------------|----------|------------|--------|---------------|
| LM End   | 3.45       | Issue Type + | Ма       | Location * |        | LS            |
| Cotogony   | Earthen L  | evee         |          | GPS La     | atitud | le/Longitude  |
| Category   |            |              |          | Start      |        | End           |
| Item   | Vegetation |              |          | 37.8177    | 47°    | 37.819583°    |
| item   |            |              |          | -121.3515  | 78°    | -121.363559 ° |
| DWR ID DWR_RD0544_02_s _ 2012_43   |            |              |          |            |        |               |
|  |            | Comn         | nent Cod | de         |        |               |
| V2 : Remove the wild growth other than native grasses from the levee slopes. |            |              |          |            |        |               |
| Inspector Comment  |            |              |          |            |        |               |
|  |            |              |          |            |        |               |
|  |            |              |          |            |        |               |
|  |            |              |          |            |        |               |



Looking southwest and levee.

| * Location   | ** Rating  |   | + Issue Type   |
|--|--|---|--|
| LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown | A : Acceptable M : Minimally Acceptable U : Unacceptable | N : Not Inspected/Rated<br>C : Corrected<br>A/W : Acceptable but Monitor & Maintain | Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement |

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# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.71      | Rating **    | U      | Issue No.  |              | 43 (cont)    |
|----------------------------------|-----------|--------------|--------|------------|--------------|--------------|
| LM End                           | 3.45      | Issue Type + | Ма     | Location * |              | LS           |
| Category Earthen Levee           |           |              | GPS La | tituc      | le/Longitude |              |
|                                  |           |              | Start  |            | End          |              |
| Item                             | Vegetatio | n            |        | 37.817747° |              | 37.819583°   |
| item                             |           |              |        | -121.3515  | 78°          | -121.363559° |
| DWR ID DWR_RD0544_02_s _ 2012_43 |           |              |        |            |              |              |
| Comment Code                     |           |              |        |            |              |              |

V2: Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment



Looking at dense vegetation on landward and waterward slope.

| LM Start     | 2.76              | Rating **      | A/W                    | Issue No.  |      | 91            |  |
|--------------|-------------------|----------------|------------------------|------------|------|---------------|--|
| LM End       | 2.77              | Issue Type +   | Ma                     | Location * |      |               |  |
| Supplemental |                   |                | GPS Latitude/Longitude |            |      |               |  |
| Category     |                   |                | Start                  |            | End  |               |  |
| Item         | 2017 Storm Damage |                |                        | 37.8174    | 00°  | 37.817300°    |  |
| пеш          | em                |                |                        | -121.3523  | ° 00 | -121.352500 ° |  |
| DWR ID       | DWR_RD0           | 544_02_f _ 201 | 7_91                   |            |      | ·             |  |
| Comment Code |                   |                |                        |            |      |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:547

Site Designation:LMA-453

Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes: levee slopes covered in dense vegetations that hindered visibility.

# Photo 1 of 3: LEVAL\_FA\_2018\_547\_4677.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 2.76                         | Rating **    | A/W                    | Issue No.  |     | 91 (cont)     |
|--------------|------------------------------|--------------|------------------------|------------|-----|---------------|
| LM End       | 2.77                         | Issue Type + | Ма                     | Location * |     |               |
| Category     |                              |              | GPS Latitude/Longitude |            |     |               |
| Calegory     |                              |              |                        | Start      |     | End           |
| Item         | 2017 Storm Damage            |              |                        | 37.81740   | 00° | 37.817300°    |
| пеш          |                              |              |                        |            | 00° | -121.352500 ° |
| DWR ID       | ID DWR_RD0544_02_f _ 2017_91 |              |                        |            |     |               |
| Comment Code |                              |              |                        |            |     |               |

### Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:547

Site Designation:LMA-453 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes: levee slopes covered in dense vegetations that hindered visibility.

| LM Start | 2.76 | Rating **    | A/W | Issue No.  | 91 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 2.77 | Issue Type + | Ma  | Location * |           |



Photo 3 of 3: LEVAL\_FA\_2018\_547\_4688.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 2.80       | Rating **    | М     | Issue No.              |     | 53           |  |
|----------------------------------|------------|--------------|-------|------------------------|-----|--------------|--|
| LM End                           | 2.80       | Issue Type + | Ma    | Location *             | LS  |              |  |
| Cotagon Earthen Levee            |            |              |       | GPS Latitude/Longitude |     |              |  |
| Category                         |            |              | Start |                        | End |              |  |
| Item                             | Trim / Thi | n Trees      |       | 37.8171                | 87° | 37.817187°   |  |
| item                             |            |              |       | -121.3529              | 64° | -121.352964° |  |
| DWR ID DWR_RD0544_02_f _ 2014_53 |            |              |       |                        |     |              |  |
| Comment Code                     |            |              |       |                        |     |              |  |

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment



Looking southwest at untrimmed tree on landward slope fall 2015.

| LM Start                         | 3.10      | Rating **    | U  | Issue No.              | 77  |              |
|----------------------------------|-----------|--------------|----|------------------------|-----|--------------|
| LM End                           | 3.10      | Issue Type + | Ma | Location *             | WS  |              |
| Cotogony Earthen Levee           |           |              |    | GPS Latitude/Longitude |     |              |
| Calegory                         | Category  |              |    |                        |     | End          |
| Item                             | Erosion / | Bank Caving  |    | 37.81758               | 38° | 37.817588 °  |
| item                             | Item      |              |    |                        | 52° | -121.358352° |
| DWR ID DWR_RD0544_02_s _ 2017_77 |           |              |    |                        |     | ·            |
| Comment Code                     |           |              |    |                        |     |              |

E1: Note and monitor erosion site.

### Inspector Comment

Rip rap was placed but does not meet Title 23 standards.

### Photo 1 of 1 : FA\_2018\_RD0544\_109\_77\_20180906\_00057.jpg



Looking northeast at conrete rubble on waterward slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 3.11      | Rating **    | A/W | Issue No.              |     | 92           |
|----------------------------------|-----------|--------------|-----|------------------------|-----|--------------|
| LM End                           | 3.12      | Issue Type + | Ma  | Location *             |     |              |
| Supplemental Supplemental        |           |              |     | GPS Latitude/Longitude |     |              |
| Calegory                         | Category  |              |     |                        |     | End          |
| Item                             | 2017 Stor | m Damage     |     | 37.8177                | 00° | 37.817800°   |
| пеш                              |           |              |     | -121.3586              | 00° | -121.358700° |
| DWR ID DWR_RD0544_02_f _ 2017_92 |           |              |     |                        |     |              |
| Comment Code                     |           |              |     |                        |     |              |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:546

Site Designation:LMA-452 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes: dense vegetations on both sides of the levee made the slopes

inaccessiable

| LM Start | 3.11 | Rating **    | A/W | Issue No.  | 92 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 3.12 | Issue Type + | Ma  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_546\_4695.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 3.11      | Rating **    | A/W | Issue No. 92 (cont) |                        | 92 (cont)    |  |
|----------------------------------|-----------|--------------|-----|---------------------|------------------------|--------------|--|
| LM End                           | 3.12      | Issue Type + | Ma  | Location *          |                        |              |  |
| Supplemental                     |           |              |     | GPS La              | GPS Latitude/Longitude |              |  |
| Calegory                         | Category  |              |     |                     |                        | End          |  |
| Item                             | 2017 Stor | m Damage     |     | 37.8177             | 00°                    | 37.817800°   |  |
| пеш                              |           |              |     | -121.3586           | 00°                    | -121.358700° |  |
| DWR ID DWR_RD0544_02_f _ 2017_92 |           |              |     |                     |                        |              |  |
| Comment Code                     |           |              |     |                     |                        |              |  |

### Inspector Comment

Levee Evaluation Comments

Description: Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:546

Site Designation:LMA-452 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes: dense vegetations on both sides of the levee made the slopes

inaccessiable



| LM Start                         | 3.20      | Rating **    | М                      | Issue No.  | 30  |             |   |
|----------------------------------|-----------|--------------|------------------------|------------|-----|-------------|---|
| LM End                           | 3.40      | Issue Type + | Ma                     | Location * | WS  |             |   |
| Category Earthen Levee           |           |              | GPS Latitude/Longitude |            |     |             |   |
| Category                         |           |              |                        | Start      |     | End         |   |
| Item                             | Animal Co | ontrol       |                        | 37.81874   | 8 ° | 37.819717   | 0 |
| item                             | item      |              |                        |            | o°  | -121.362733 | 0 |
| DWR ID DWR_RD0544_02_s _ 2013_30 |           |              |                        |            |     |             |   |
| Comment Code                     |           |              |                        |            |     |             |   |

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

No Photos

\* Location N/A: Not Applicable LS: Land Side WS: Water Side

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start    | 3.22              | Rating **      | A/W       | Issue No.   |              | 62          |  |  |  |
|-------------|-------------------|----------------|-----------|-------------|--------------|-------------|--|--|--|
| LM End      | 3.22              | Issue Type +   | Ma        | Location *  |              | LS          |  |  |  |
| Cotogony    | Earthen L         | evee           |           | GPS La      | atitud       | e/Longitude |  |  |  |
| Category    |                   |                |           | Start       |              | End         |  |  |  |
| Item        | Trim / Thi        | n Trees        |           | 37.8189     | 85 °         | 37.818985°  |  |  |  |
| пеш         |                   |                | -121.3596 | 75°         | -121.359675° |             |  |  |  |
| DWR ID      | DWR_RD0           | 544_02_s _ 201 | 5_62      |             |              |             |  |  |  |
|             |                   | Comn           | nent Cod  | de          |              |             |  |  |  |
| T1 : Trim t | rees to at I      | east five feet | above g   | round level |              |             |  |  |  |
|             |                   |                |           |             |              |             |  |  |  |
|             | Inspector Comment |                |           |             |              |             |  |  |  |
|             |                   |                |           |             |              |             |  |  |  |
|             |                   |                |           |             |              |             |  |  |  |
|             |                   |                |           |             |              |             |  |  |  |

No Photos

|                                  | LM Start     | 3.25                   | Rating **    | A/W         | Issue No.  | 93 |           |   |
|----------------------------------|--------------|------------------------|--------------|-------------|------------|----|-----------|---|
|                                  | LM End       | 3.34                   | Issue Type + | Ма          | Location * |    |           |   |
|                                  | Category     | GPS Latitude/Longitude |              |             |            |    |           |   |
|                                  | Calegory     |                        | Start        |             | End        |    |           |   |
|                                  | Item         | 2017 Storm Damage      |              |             | 37.819300° |    | 37.819800 | ٥ |
|                                  | пеш          | -121.3602              | 00°          | -121.361600 | 0          |    |           |   |
| DWR ID DWR_RD0544_02_f _ 2017_93 |              |                        |              |             |            |    |           |   |
|                                  | Comment Code |                        |              |             |            |    |           |   |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:545

Site Designation:LMA-451

Repair Type: Erosion Rating:Area of Concern

Field Date:8/18/2017

Notes:



\* Location N/A: Not Applicable LS: Land Side WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 3.25              | Rating **              | A/W | Issue No.  | 93 (cont) |               |  |  |
|----------------------------------|-------------------|------------------------|-----|------------|-----------|---------------|--|--|
| LM End                           | 3.34              | Issue Type +           | Ма  | Location * |           |               |  |  |
| Category                         | ental             | GPS Latitude/Longitude |     |            |           |               |  |  |
| Calegory                         |                   |                        |     | Start      |           | End           |  |  |
| Item                             | 2017 Storm Damage |                        |     | 37.81930   | 00°       | 37.819800°    |  |  |
| пеш                              |                   |                        |     | -121.36020 | 00°       | -121.361600 ° |  |  |
| DWR ID DWR_RD0544_02_f _ 2017_93 |                   |                        |     |            |           |               |  |  |
|                                  | Comment Code      |                        |     |            |           |               |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:545

Site Designation:LMA-451 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:

| LM Start | 3.25 | Rating **    | A/W | Issue No.  | 93 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 3.34 | Issue Type + | Ma  | Location * |           |



Photo 3 of 3: LEVAL\_FA\_2018\_545\_4774.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type A/W : Acceptable but Monitor & Maintain

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

|              |   | D 11 ++        |            | I NI          |             |               |  |
|--------------|---|----------------|------------|---------------|-------------|---------------|--|
| LM Start     | 3.29  | Rating **      | М          | Issue No.     |             | 54            |  |
| LM End       | 3.29  | Issue Type +   | Ma         | Location *    |             | LS            |  |
| Category     | evee  | GPS La         | atitud     | le/Longitude  |             |               |  |
| Category     | Category  |                |            |               |             | End           |  |
| Vegetation   |   |                | 37.819635° |               | 37.819635 ° |               |  |
| itom         |   |                |            | -121.360619 ° |             | -121.360619 ° |  |
| DWR ID       | DWR_RD0   | 544_02_f _ 201 | 4_54       |               |             |               |  |
| Comment Code |   |                |            |               |             |               |  |
| V4 : Elderk  | V4 : Elderberries are blocking visibility and flood fight capability. |                |            |               |             |               |  |

Inspector Comment

No Photos

Rating \*\* С Issue No. 3.48 LM Start 36 3.51 Issue Type + Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 37.819576° 37.819530° Item -121.364056° -121.364653° DWR\_RD0544\_02\_s \_ 2012\_36 DWR ID

No Photos

Comment Code
V2 : Remove the wild growth other than native grasses from the levee slopes.

### Inspector Comment

Cactus on landside slope.

| LM Start                         | 3.49              | Rating **    | М  | Issue No.  | 55    |              |  |
|----------------------------------|-------------------|--------------|----|------------|-------|--------------|--|
| LM End                           | 3.52              | Issue Type + | Ma | Location * | LS    |              |  |
| Category                         | Earthen L         | evee         |    | GPS La     | titud | le/Longitude |  |
| Calegory                         |                   |              |    | Start      |       | End          |  |
| Item                             | Trim / Thin Trees |              |    | 37.8195    | 63°   | 37.819542°   |  |
| пеш                              |                   |              |    | -121.3643  | 07°   | -121.364908° |  |
| DWR ID DWR_RD0544_02_f _ 2014_55 |                   |              |    |            |       |              |  |
| Comment Code                     |                   |              |    |            |       |              |  |

T2: Thin trees to allow visibility of the ground and room to flood fight.

Inspector Comment



Looking southwest at untrimmed trees on landward slope and toe fall 2015.

\*\* Rating
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence
U: Unacceptable AW: Acceptable but Monitor & Maintain En: Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                         | 3.51         | Rating **              | A/W | Issue No.  | 94  |              |  |  |
|----------------------------------|--------------|------------------------|-----|------------|-----|--------------|--|--|
| LM End                           | 3.55         | Issue Type +           | Ma  | Location * |     |              |  |  |
| Category                         | ental        | GPS Latitude/Longitude |     |            |     |              |  |  |
| Calegory                         |              |                        |     | Start      |     | End          |  |  |
| Item                             | 2017 Stor    | m Damage               |     | 37.819500° |     | 37.819400°   |  |  |
| пеш                              |              |                        |     | -121.3647  | 00° | -121.365400° |  |  |
| DWR ID DWR_RD0544_02_f _ 2017_94 |              |                        |     |            |     |              |  |  |
|                                  | Comment Code |                        |     |            |     |              |  |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:544

Site Designation:LMA-450 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

| LM Start | 3.51 | Rating **    | A/W | Issue No.  | 94 (cont) |
|----------|------|--------------|-----|------------|-----------|
| LM End   | 3.55 | Issue Type + | Ма  | Location * |           |



Photo 2 of 3: LEVAL\_FA\_2018\_544\_4782.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start                               | 3.51                            | Rating **    | A/W | Issue No.  | 94 (cont) |               |  |
|--|---------------------------------|--------------|-----|------------|-----------|---------------|--|
| LM End                                 | 3.55                            | Issue Type + | Ma  | Location * |           |               |  |
| Category Supplemental GPS Latitude/Lon |                                 |              |     |            |           | le/Longitude  |  |
| Calegory                               |                                 |              |     | Start      |           | End           |  |
| Item                                   | 2017 Stor                       | m Damage     |     | 37.81950   | o°        | 37.819400°    |  |
| пеш                                    |                                 |              |     | -121.36470 | o°        | -121.365400 ° |  |
| DWR ID                                 | /R ID DWR_RD0544_02_f _ 2017_94 |              |     |            |           |               |  |
|  | Comment Code                    |              |     |            |           |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:544

Site Designation:LMA-450 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:



| LM Start                         | 3.57                   | Rating **    | M  | Issue No.  |     | 19          |   |
|----------------------------------|------------------------|--------------|----|------------|-----|-------------|---|
| LM End                           | 3.57                   | Issue Type + | Ma | Location * |     | LS          |   |
| Category                         | GPS Latitude/Longitude |              |    |            |     |             |   |
| Category                         |                        |              |    | Start      |     | End         |   |
| Trim / Thin Trees                |                        |              |    | 37.819400° |     | 37.819400   | 0 |
| Item                             |                        |              |    | -121.3657  | 62° | -121.365762 | 0 |
| DWR ID DWR_RD0544_02_f _ 2013_19 |                        |              |    |            |     |             |   |
| Comment Code                     |                        |              |    |            |     |             |   |

T1 : Trim trees to at least five feet above ground level.

Inspector Comment

No Photos

| * Location     |                     | ** Rating                |    |
|----------------|---------------------|--------------------------|----|
| LS: Land Side  | N/A: Not Applicable | A : Acceptable           |    |
| WS: Water Side |                     | M : Minimally Acceptable |    |
| CR · Crown     |                     | II · I Inaccentable      | Δ/ |

N : Not Inspected/Rated C : Corrected /W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence
En : Enforcement

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 3.57                      | Rating **    | A/W                    | Issue No.  | 95  |              |  |
|--------------|---------------------------|--------------|------------------------|------------|-----|--------------|--|
| LM End       | 3.58                      | Issue Type + | Ma                     | Location * |     |              |  |
| Supplemental |                           |              | GPS Latitude/Longitude |            |     |              |  |
| Category     |                           |              | Start                  |            | End |              |  |
| Item         | 2017 Storm Damage         |              |                        | 37.8194    | 00° | 37.819400 °  |  |
| пеш          |                           |              |                        | -121.3658  | 00° | -121.365900° |  |
| DWR ID       | DWR_RD0544_02_f _ 2017_95 |              |                        |            |     |              |  |
| Comment Code |                           |              |                        |            |     |              |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:543

Site Designation:LMA-449 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

| LM Start   | 3.57 | Rating **    | A/W   | Issue No.  | 95 (cont)  |
|------------|------|--------------|-------|------------|------------|
| LIVI Start | 3.37 | · tatii ig   | ,,,,, | .0000      | 33 (COIII) |
| LM End     | 3.58 | Issue Type + | Ma    | Location * |            |



Photo 2 of 3: LEVAL\_FA\_2018\_543\_4797.jpg



# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start     | 3.57                      | Rating **    | A/W   | Issue No.              | 95 (cont) |               |  |
|--------------|---------------------------|--------------|-------|------------------------|-----------|---------------|--|
| LM End       | 3.58                      | Issue Type + | Ма    | Location *             |           |               |  |
| Supplemental |                           |              |       | GPS Latitude/Longitude |           |               |  |
| Category     |                           |              | Start |                        | End       |               |  |
| Item         | 2017 Storm Damage         |              |       | 37.81940               | 00°       | 37.819400°    |  |
| пеш          |                           |              |       | -121.36580             | 00°       | -121.365900 ° |  |
| DWR ID       | DWR_RD0544_02_f _ 2017_95 |              |       |                        |           |               |  |
| Comment Code |                           |              |       |                        |           |               |  |

### Inspector Comment

Levee Evaluation Comments

Description:Slope protection repairs are needed along the waterside slope due to erosion and riprap displacement from high water. Based upon levee inspections, it was determined the waterside levee slope is eroding, deteriorating, and degrading. The eroded levee sections need to be restored back to design standards to prevent further deterioration and damage.

Site ID No:543

Site Designation:LMA-449 Repair Type: Erosion Rating:Area of Concern Field Date:8/18/2017

Notes:



| LM Start                         | 3.58           | Rating **    | М  | Issue No.              |     | 67           |  |
|----------------------------------|----------------|--------------|----|------------------------|-----|--------------|--|
| LM End                           | 3.58           | Issue Type + | Ma | Location *             |     | LS           |  |
| Category Earthen Levee           |                |              |    | GPS Latitude/Longitude |     |              |  |
| Calegory                         |                |              |    | Start                  |     | End          |  |
| Item                             | Animal Control |              |    | 37.8194                | 19° | 37.819419°   |  |
| пеш                              |                |              |    | -121.3658              | 54° | -121.365854° |  |
| DWR ID DWR_RD0544_02_f _ 2015_67 |                |              |    |                        |     |              |  |
|                                  |                |              |    |                        |     |              |  |

#### Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Inspector Comment

Large rodent holes on landward slope.

### Photo 1 of 2 : FA\_2018\_RD0544\_109\_67\_20180906\_00044.jpg



Looking northeast at typical view of rodent holes on landward slope.

# Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

# Reclamation District No. 0544 Upper Roberts Island

| Waterway              | Bank  | Unit Miles | Inspection<br>Start/End  | Inspector             |
|-----------------------|-------|------------|--------------------------|-----------------------|
| Unit No. 02 Old River | Right | 4.15       | 09/13/2018<br>09/13/2018 | Richard<br>Willoughby |

| LM Start  | 3.58                             | Rating **      | М            | Issue No.  |               | 67 (cont)    |  |  |
|---|----------------------------------|----------------|--------------|------------|---------------|--------------|--|--|
| LM End  | 3.58                             | Issue Type +   | Ma           | Location * |               | LS           |  |  |
| Earthen Levee   |                                  |                |              | GPS La     | atitud        | le/Longitude |  |  |
| Category  |                                  |                |              | Start      |               | End          |  |  |
| Item  | Animal Co                        | Animal Control |              |            | 19°           | 37.819419°   |  |  |
| пеш   |                                  |                | -121.365854° |            | -121.365854 ° |              |  |  |
| DWR ID  | DWR ID DWR_RD0544_02_f _ 2015_67 |                |              |            |               |              |  |  |
|   |                                  | Comn           | nent Cod     | de         |               |              |  |  |
| A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. |                                  |                |              |            |               |              |  |  |
| Inspector Comment   |                                  |                |              |            |               |              |  |  |
| Large rodent holes on landward slope.   |                                  |                |              |            |               |              |  |  |
|   |                                  |                |              |            |               |              |  |  |
|   |                                  |                |              |            |               |              |  |  |



Looking north at typical view of rodent holes on landward slope.

| LM Start                         | 4.05       | Rating **    | U                      | Issue No.  |      | 64           |  |
|----------------------------------|------------|--------------|------------------------|------------|------|--------------|--|
| LM End                           | 4.05       | Issue Type + | Ma                     | Location * | LS   |              |  |
| Earthen Levee                    |            |              | GPS Latitude/Longitude |            |      |              |  |
| Category                         |            |              | Start                  |            | End  |              |  |
| Item                             | Vegetation |              |                        | 37.8216    | 20°  | 37.821620°   |  |
| пеш                              | item       |              |                        |            | 83 ° | -121.373283° |  |
| DWR ID DWR_RD0544_02_s _ 2015_64 |            |              |                        |            |      | ·            |  |
| Comment Code                     |            |              |                        |            |      |              |  |

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos